Search history

Search 1:	FT=can and end and (print* or decorat*) and (beverage* or food*) (Results 5420)
Search 2:	FT=can and end and (print* or decorat*) and (beverage* or food*) and (orient* or guid*) (Results 1483)
Search 3:	FT=can and end and (print* or decorat*) and (beverage* or food*) and (orient* or guid*) and tab (Results 120)
Search 4:	FT="can end" and (beverage* or food*) and (orient* or guid*) and tab (Results 74)
Search 5:	FT=("can end" or "can ends") and (beverage* or food*) and (orient* or guid* or positio*) (Results 577)
Search 6:	FT=("can end" or "can ends") and (beverage* or food*) and (orient* or guid* or positio*) and tab (Results 194)
Search 7:	FT="can end" and rotat* and tab (Results 215)

- session log created:19 June 2017 03:35:20
- Update information:

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PatBase Coverage includes 100+ million documents from over 100 patent–issuing authorities and includes patent applications, granted patents, utility models and designs â€“ detailed in the below coverage listings.

Major countries

Publishing body	Document type	Bibliographic publication date		Full–Text publication date	
		Earliest	Latest	Earliest	Latest
CN China	Patent Applications	19850910	20170609	19850910	20170609
	Patents	19930106	20170609	19930106	20170609
	Utility Model Applications	19850409	19921230	19850409	19921230
	Utility Models	19930106	20170609	19930106	20170609
	Designs	19850910	20170609	19850910	20150819
DE Germany	Patent Applications	19211221	20170608	19650317	20170608
	Patents	18770101	20170608	19200113	20170608
	Utility Models	19280626	20170608	19610831	20170608
	EP/WO Patents	19871217	20140410		
EP European Patent Office	Patent Applications	19781220	20170607	19781220	20170607
	Patents	19800109	20170607	19800109	20170607
FR France	Patent Applications	19690307	20170609	19810102	20170512
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	Utility Model Applications	19720107	20170609	19800104	20170512
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GB United Kingdom	Unpublished Patent Applications	19830209	20170531		
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JP Japan	Patent Applications	19710116	20170615	19930108	20170601
	Patents	19281026	20170524	19960529	20170524
	Utility Model Applications	19710723	20060209	19990817	20031107
	Utility Models	19640805	19960329		
	Registered Utility Models	19940726	20170525	19940726	20101216
	Designs	20141110	20170605		
KR Republic of Korea	Patent Applications	19781209	20170609	19940103	20170609
	Patents	19700820	20170609	19970104	20170609
	Utility Model Applications	19781127	20170609	19940730	20170609
	Utility Models	19780110	20170609	19970104	20170609
US United States of America	Patent Applications	20010315	20170608	20010315	20170608
	Patents	18360101	20170606	18560617	20170606
	Designs	18650912	20170606	19770719	20170606
WO World Intellectual Property Organization (WIPO)	Patent Applications	19781019	20170608	19781019	20170608
	Designs	20151127	20170602	20151127	20170602

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- **search:** SS1 FT=can and end and (print* or decorat*) and (beverage* or food*) (Results 5420)
- **search:** SS2 FT=can and end and (print* or decorat*) and (beverage* or food*) and (orient* or guid*) (Results 1483)
- List: SS2 1–50 (FT=can and end and (print* or decorat*) and (beverage* or food*) and (orient* or guid*)) (Results 1483)

0) US2002110625A – CONTINUOUS PACKAGING IN ENCLOSED CONDUITS

1) Family number: 29750624 (US2002110625A)

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Title: CONTINUOUS PACKAGING IN ENCLOSED CONDUITS

Priority:

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A22C17/00 A22C17/08 A22C17/10 A22C18/00 A23B4/00 A23B4/12 A23B4/16 A23B4/18 A23B4/20 A23B4/24 A23B4/26 A23K1/18 A23L1/015 A23L1/27 A23L1/31 A23L1/312 A23L1/313 A23L1/317 A23L1/48 A23L13/00 A23L13/20 A23L13/30 A23L13/60 A23L3/015 A23L3/34 A23L3/3418 A23L3/3445 A23L35/00 A23L5/20 A23L5/40 A23P1/00 A23P1/02 A23P1/10 A61L2/16 B01D21/02 B01D21/26 B04B3/04 B32B37/00 B60K6/12 B61J1/08 B65B25/06 B65B31/00 B65B31/02 B65B47/02 B65B55/00 B65B55/12 B65B7/16 B65D21/00 B65D21/06 B65D5/42 B65D6/10 B65D77/20 B65D81/00 B65D81/20 B65D81/26 B65D81/28 B65D85/00 B65G47/61 C10L1/18 C10L5/00 C10L5/40 C12C3/04 F02B57/08 G01N21/00 G01N31/12 G01N33/12 G06Q30/00 (Advanced/Invention); B04B1/20 (Advanced/Non–invention); A23B4/00 A23B4/12 A23B4/14 A23B4/26 A23L1/015 A23L1/27 A23L1/31 A23L1/317 A23L3/015 A23L3/34 A23P1/02 A61L2/16 B01D21/02 B32B37/00 B65B25/00 B65B31/02 B65B7/16 B65D21/06 B65D6/00 B65D77/10 B65D81/20 B65D81/26 B65D81/28 C12C3/00 G01N33/02 (Core/Invention)

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Classification Explorer

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Abstract:
Source: US2002110625A The invention relates to a package having a first web defining a cavity and a second web bonded to the first web, wherein the second web includes microperforations at a location that is specific to minimize the escape of liquids from the cavity to the exterior of the package. In one particular embodiment, the first web defines a four sided cavity with walls and corresponding flaps attached to the walls that can be folded and bonded to the cavity walls. The second web is an overwrapping lidding web, wherein microperforations are provided on the web material so that the microperforations are aligned with a flap recess, which in turn is in communication with the interior of the tray cavity. In this manner, suitable gas exchange can occur with minimal to no escape of liquids from the tray cavity.

0) US2014209093A – PROCESSING BIOMASS

2) Family number: 56254366 (US2014209093A) © PatBase

Title: PROCESSING BIOMASS

Priority:

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Agent(s): WRAYS; WRAYS PTY LTD; MARKS AND CLERK; KEANE PAUL FACHTNA; OCONNELL MAURA; O CONNELL MAURA; CASEY ALAN MICHAEL; ACHMAD FATCHY; DONALDSON AND BURKINSHAW LLP; LEBER PATENT LAW PC; WILMER CUTLER PICKERING HALE AND DORR LLP; LEBER IP LAW; DE REGE THESAURO FRANCESCO; MORRELL DENNIS G; MORRELL DENNIS G ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A23L A23L3/26 A61L2/08 B01D B01D15/00 B01D15/02 B01D15/04 B01D15/18 B01D3/00 B01D33/06 B01D35/00 B01D37/02 B01D39/08 B01D53/32 B01D53/44 B01D53/66 B01D53/81 B01D53/82 B01D61/42 B01D61/44 B01F15/06 B01F7/08 B01J B01J19/08 B01J19/12 B01J19/14 B01J19/22 B01J20/12 B01J20/18 B01J20/26 B01J20/281 B01J20/34 B01J23/36 B01J27/053 B01J38/10 B01J38/12 B01J39/20 B01J39/26 B03B5/02 B07B1/28 B07B9/00 B09B3/00 B09B5/00 B65G17/30 B65G27/00 B65G27/04 B65G33/14 B65G33/24 B65G47/00 B65G49/00 B65G53/04 B65G53/24 B65G53/40 B65G53/60 C02F11/00 C02F11/02 C07C29/149 C07C29/156 C07C31/00 C07C31/12 C07C51/00 C07C67/08 C07C69/24 C08H8/00 C08J3/00 C08J3/28 C08L97/02 C10B19/00 C10B53/02 C10G1/00 C10G1/02 C10G32/04 C10L1/02 C10L5/40 C10L5/44 C10L5/46 C10L9/08 C12F3/02 C12M1/00 C12N C12N1/02 C12N1/22 C12N13/00 C12P C12P1/00 C12P1/02 C12P1/04 C12P19/00 C12P19/02 C12P19/14 C12P3/00 C12P7/00 C12P7/02 C12P7/04 C12P7/06 C12P7/08 C12P7/10 C12P7/14 C12P7/24 C12P7/26 C12P7/40 C12P7/44 C12P7/52 C12P7/54 C12P7/56 C12P7/62 C12P7/64 C13K1/00 C13K1/02 C13K1/04 C13K13/00 D06M D06M10/00 D21B1/02 D21C1/00 D21C1/10 D21C5/00 D21C9/00 E04B1/92 E04H5/00 E04H5/02 F01D15/10 F01K13/00 F22B1/02 G01T G01T7/08 G1T7/08 G21F1/04 G21F1/08 G21F3/00 G21F7/00 G21K G21K5/00 G21K5/02 G21K5/04 G21K5/10 H01J33/04 H01J37/20 H01J37/30 H01J37/317 H01J5/18 H01J7/26 H05H7/00 (Advanced/Invention);
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Abstract:
Source: US2014209093A Methods and systems are described for processing cellulosic and lignocellulosic materials into useful intermediates and products, such as energy and fuels. For example, conveying systems and methods, such as highly efficient vibratory conveyors, are described for the processing of the cellulosic and lignocellulosic materials.

0) US2013278076A – TELEMETRY SYSTEM WITH WIRELESS POWER RECEIVER A...

3) Family number: 55004628 (US2013278076A) © PatBase

Title: TELEMETRY SYSTEM WITH WIRELESS POWER RECEIVER AND MONITORING DEVICES

Priority:

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Family:

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Probable Assignee: HELLO INC

Assignee(s):(std)**:** HELLO INC ; PROUD JAMES ; SHOOK ROBERT

Inventor(s):(std)**:** FAN BRYAN ; FERNANDEZ JOAQUIN ; PROUD JAMES ; SHOOK ROBERT ; KELLEY JOHN ; HELLO INC ; FUSI DANIELE ; FULTON JOHN

Agent(s): PAUL; MINTZ; MINTZ LEVIN; MINTZ LEVIN COHN FERRIS GLOVSKY AND POPEO PC; BEYER LAW GROUP LLP; DAVIS PAUL ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A44C5/00 A44C5/20 A61B10/00 A61B5/00 A61B5/01 A61B5/02 A61B5/0205 A61B5/024 A61B5/04 A61B5/0404 A61B5/0456 A61B5/08 A61B5/103 A61B5/11 A61B5/113 A61B5/117 A61B5/145 A61B5/1455 A61B5/16 A61B5/22 A61B7/00 A61B7/02 A61B7/04 A61B90/90 A61B90/98 A61M21/02 A63B24/00 G01D4/00 G01K13/00 G06F1/16 G06F15/16 G06F19/00 G06F21/00 G06F3/01 G06F9/44 G06F9/445 G06K19/04 G06K19/077 G06K7/10 G06Q10/00 G06Q20/02 G06Q20/08 G06Q20/32 G06Q20/40 G06Q40/00 G06Q40/04 G06Q50/24 G08B1/08 G08B21/02 G08B21/24 G08B23/00 G08B29/00 G08B5/36 G08C17/02 G08C19/16 G09F3/00 G10L21/00 G11B20/10 H01F27/42 H01F37/00 H01F38/00 H01F38/14 H02J17/00 H02J5/00 H02J7/00 H02J7/02 H04B5/00 H04B5/02 H04L12/26 H04L29/00 H04L29/06 H04L29/08 H04M11/00 H04M11/04 H04N7/18 H04Q9/00 H04W4/00 H04W4/02 H04W4/08 H04W4/20 (Advanced/Invention);
A61B5/00 A61B5/01 A61B5/0205 A61B5/024 A61B5/11 A61B5/16 A61B90/30 A63B24/00 C08L83/04 C09D183/00 G01C22/00 G06F19/00 G06F9/445 G08B21/04 H02J7/00 H02J7/02 H04L29/08 H04M1/725 H04M11/00 H04W4/02 (Advanced/Non–invention)

CPC: H04L65/403 H01F38/14 G06F8/65 G06Q20/322 G06Q50/24 G08B21/24 G08B23/00 G01D4/002 G10L21/00 A61B5/0026 A61B5/02 G06Q10/00 A61B2560/0219 H02J7/0044 G06Q40/00 A61B5/117 A61B5/0004 A61B5/7271 G01D4/004 H04L43/18 A61B5/0075 A61B2560/0242 A61B2560/0443 H04M1/72569 A44C5/0007 H04L67/20 H04L67/306 H04W4/028 H04W4/08 H04M11/002 A61B5/683 G01C22/006 H04W4/00 H04W4/027 A44C5/2071 A61B5/721 A61B5/7425 G08B21/0423 G08B21/0453 H04M1/7253 H04M2250/10 A61B5/0015 Y02B60/183 H02J50/60 G06F1/163 A44C5/0053 A44D2203/00 A61B5/024 A61B5/6807 A61B5/681 A61B5/7465 A61B5/747 H04L67/125 H04W4/005 H04W4/206 H02J50/40 H04B5/0031 H04B5/02 A61B5/002 A61B5/02427 A61B5/165 A61B5/7435 A61B2560/0456 A61B2562/12 C08L83/04 C09D183/00

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US class: 1/1 235/492 307/104 307/114 320/108 320/115 340/12.5 340/539.11 340/539.12 340/539.22 340/573.1 340/870.01 340/870.02 340/870.03 340/870.07 340/870.09 340/870.11 340/870.16 348/143 381/56 600/27 600/301 600/324 600/476 600/549 600/586 600/595 63/1.11 63/1.13 700/91 702/19 704/275 705/3 705/37 705/39 705/44 709/204 709/224 717/168 717/172 D11/5

Locarno class: 11/01

Classification Explorer

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Abstract:
Source: US2013278076A A wireless power receiver includes a rectifier coupled to an antenna. The antenna receives a wireless power signal, and converts the signal to a direct current input signal. A direct current–to–direct current converter generates a direct current output signal based in part on the direct current input signal and a pulse–width modulation signal. A pulse modulator is configured to adjust an alternating current impedance of the wireless power receiver by modifying, based in part on the direct current input signal, a duty cycle of the pulse–width modulation signal to the direct current–to–direct current converter. A monitoring device is in communication with the rectifier and the pulse modulator. The monitoring device has one or more sensors and a unique user ID. The one or more sensors acquire user information selected from of at least one of, a user's activities, behaviors and habit information. ID circuitry is at the monitoring device.

0) US2011195775A – GAMING DEVICE AND METHOD FOR WIRELESS GAMING SY...

4) Family number: 49396705 (US2011195775A) © PatBase

Title: GAMING DEVICE AND METHOD FOR WIRELESS GAMING SYSTEM PROVIDING NON−INTRUSIVE PROCESSES

Priority:

US20100303106P	20100210	US20100334682P	20100514	US20100943792	20101110
US20100943797	20101110	US20100943798	20101110	US20100943789	20101110
US20100943802	20101110	US20110086218	20110413	US20110294064	20111110
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US20150949982	20151124	US20150970332	20151215	US20160342799	20161103
US20170424471	20170203				

Family:

Publication number	Publication date	Application number	Application date
US2011195775 AA	20110811	US20100943789	20101110
US2011195786 AA	20110811	US20100943792	20101110
US2011195787 AA	20110811	US20100943797	20101110
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WO11100020 A1	20110818	WO2010US59551	20101208	

Probable Assignee: IGT RENO NEV

Assignee(s):(std)**:** IGT RENO NEV ; LEAP FORWARD GAMING ; LEAP FORWARD GAMING INC ; LUNDY CHRISTOPHER ; WELLS WILLIAM R ; SAFFARI ALI ; PAULSEN CRAIG ; MGM RESORTS MFG CORP

Assignee(s): IGT ; MACQUARIE US TRADING LLC

Inventor(s):(std)**:** GUMIELA CHRIS ; KOVER KIRK ; LUNDY CHRISTOPHER T ; MIKULICH THOMAS ; NOVOTAK JR ANDREW GEORGE ; PAGE TIMOTHY ALLAN ; PAULSEN CRAIG A ; QUICK THOMAS ; WELLS WILLIAM R ; SAFFARI ALI ; PAULSEN CRAIG ; LUNDY CHRISTOPHER

Agent(s): BEYER LAW GROUP LLP; KWAN AND OLYNICK LLP; NEAL GERBER AND EISENBERG LLP; OLYNICK DAVID P ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class(IPC 8–9)**:** A63F11/00 A63F13/00 A63F13/08 A63F9/00 A63F9/24 G06F1/00 G06F11/30 G06F13/14 G06F17/00 G06F17/40 G06F21/06 G06Q20/10 G06Q20/32 G06Q30/02 G07D7/00 G07F17/32 G07F17/34 G07F17/42 G07F9/02 G09F17/00 (Advanced/Invention)

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European class: G07F17/32 G07F17/32C G07F17/32C6 G07F17/32E4 G07F17/32E6B G07F17/32H G07F9/02D

US class: 1/1 194/200 194/202 29/401.1 462/31 462/42 463/16 463/17 463/20 463/24 463/25 463/25P 463/27 463/29 463/29P 463/29S 463/30 463/30S 463/31 463/35 463/37 463/37P 463/40 463/42 463/42P 463/42S 463/43 463/43P 463/46 463/46S 463/47 463/47S 713/300 713/310

Classification Explorer

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Abstract:
Source: US2011195775A A gaming peripheral for a gaming machine is described. The gaming peripheral can be configured to emulate the functions of a lighting device, such as a candle. The gaming peripheral can be configured to provide enhanced gaming features such as 1) enhanced networking capabilities, 2) enhanced peripheral device monitoring and upgrade capabilities, 3) enhanced player monitoring and security capabilities 4) enhanced gaming function capabilities and 5) enhanced player reward capabilities. The enhanced gaming features can be provided in a non−intrusive manner such that regulated software executed on a gaming machine does not have to be altered.

0) US2004046736A – NOVEL MAN MACHINE INTERFACES AND APPLICATIONS

5) Family number: 11839475 (US2004046736A) © PatBase

Title: NOVEL MAN MACHINE INTERFACES AND APPLICATIONS

Priority:

EP20040759053 20040331 EP20130150499 20040331 US19940290516 19940815
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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

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CPC: A63F7/027 A63F2003/00974 A63F2009/243 A63F2009/2435 A63F2009/2457 G06F3/0423 G06F2203/0381 G06F3/0426 H04N9/3129 G06F2203/04808 Y10S128/92 Y10S128/921 Y10S128/922 A63F2300/8023 G06F3/01 G06K9/00335 G06K9/2018 G06T2207/10021 G06T2207/30196 G06T2207/30204 A63B24/0062 A63B71/06 A63B24/0075 G06F19/3475 G06F19/3481 G06Q30/06 A63F13/02 A63F13/04 A63F13/10 A63F2300/1043 A63F2300/1062 A63F2300/1081 A63F2300/6045 A63F2300/69 G06F3/038 G06F3/0428 G06F19/3406 G06F19/3418 G06F19/3437 G10H1/0008 G10H2220/321 B60K2350/1004 G06T2219/2016 G06T2219/2021 G06F3/0346 G06F17/5095 G06F2217/32 G05B19/0423 A47L15/0063 G01F23/292 G05B2219/23031 G05B2219/2643 G05B2219/31048 A63F2300/1093 B60K2350/2052 F24C7/082 H05B6/6435 H05B2213/04 B60K2350/1044 B60K2350/1052 B60K2350/355 Y10S482/90 Y10S482/901 B60R11/02 B60R11/0235 B60R2011/0005 B60R2011/0007 B60R2011/0012 B60R2011/0028 B60R2011/0029 B60R2011/0042 B60R2011/0094 G06F3/042 B60K37/02 B60K2350/106 B60K2350/1072 G06F3/0421 G06F3/04886 G01C21/365 B60K2350/2013 B60K2350/925 B60K2350/962 G01C21/265 G06T19/20 G06F2203/04109 G06F3/012 G06F3/014 A63F13/213 A63F13/245 A63F13/803 A63F13/428 A63F13/2145 A63F13/00 A63F2300/1075 A63F2300/1087 A63F2300/30 A63F2300/308 A63F2300/8011 G07F17/3297 G06F3/0304 G06F3/0325 G06F3/011 A63F3/00643 A63F7/0005 A63F13/06 A63F2009/0012 A63F2009/2419 A63F2009/2433 A63F2250/50 A63F2300/1068 G06F2203/04101 G01S5/16 G05G1/105 B60K2350/1016 G06F3/0425 B60K2350/102 B60K2350/104 G01C21/3664 G06F3/0312 G06F3/03545 G06F3/04847 G06F3/0488 G06F2203/04108 G06F2203/04809 G06T7/246 G06T7/593 G06T7/73 B33Y50/00 B60K35/00 B60K37/06 B60K2350/1024 B60K2350/1028 B60K2350/901 G06F3/016 G06F3/017 G06F3/0416 G06F3/04883

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Abstract:
Source: US2004046736A Affordable methods and apparatus are disclosed for inputting position, attitude (orientation) or other object characteristic data to computers for the purpose of Computer Aided Design, Painting, Medicine, Teaching, Gaming, Toys, Simulations, Aids to the disabled, and internet or other experiences. Preferred embodiments of the invention utilize electro−optical sensors, and particularly TV Cameras, providing optically inputted data from specialized datum's on objects and/or natural features of objects. Objects can be both static and in motion, from which individual datum positions and movements can be derived, also with respect to other objects both fixed and moving. Real−time photogrammetry is preferably used to determine relationships of portions of one or more datums with respect to a plurality of cameras or a single camera processed by a conventional PC.

0) US2003013172A – NOVEL METHODS OF ENZYME PURIFICATION

6) Family number: 29482605 (US2003013172A) © PatBase

Title: NOVEL METHODS OF ENZYME PURIFICATION

Priority:

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Probable Assignee: VERENIUM CORP

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SHORT JAY M ; SLUPSKA MATGORZATA ; SLUPSKA MALGORZATA ; VERENIUM CORP ; SYNGENTA PARTICIPATIONS AG ; SHORT JAY

Assignee(s): SYNGENTA PARTICIPATIONS ; VERENIUM CORP SAN DIEGO ; COMERICA BANK A TEXAS BANKING ASSOCIATION ; ATHYRIUM OPPORTUNITIES FUND A LP ; BASF ENZYMES LLC SAN DIEGO ; KEROVUO JANNE E

Inventor(s):(std)**:** BARTON NELSON R ; CARL A MILLER ; CARL MILLER ; EILEEN O DONOGHUE ; ERIC MATHUR ; G FREY ; GERHARD FREY ; GRAY KEVIN ; GRAY KEVIN A ; JAMES B GARRETT ; JANNE S KEROVUO ; JAY M SHORT ; KEROVUO JANNE E ; KEROVUO JANNE S ; KEVIN A GRAY ; KEVIN GRAY ; MARTIN KAZAOKA ; MATGORZATA SLUPSKA ; NAHLA ABOUSHADI ; NELSON BARTON ; RICHARDSON T ; SLUPSKA MALGORZATA ; SLUPSKA MATGORZATA ; T RICHARDSON ; TOBY RICHARDSON ; W CALLEN ; WALTER CALLEN ; GARRETT JAMES B ; FREY G ; CALLEN W ; ABOUSHADI NAHLA ; MATHUR ERIC ; RICHARDSON TOBY ; MILLER CARL A ; MILLER CARL ; KAZAOKA MARTIN ; MATHUR ERIC J ; GERENDASH JOEL ; GARRETT JAMES ; FREY GERHARD ; SHORT JAY M ; RICHARSON TOBY ; CALLEN WALTER ; ABOUSHADI NAHLA M ; SHORT JAY ; O DONOGHUE EILEEN ; KEROVOU JANNE S ; BARTON NELSON

Inventor(s): BARTON NELSON SAN DIEGO ; RICHARDSON TOBY SAN DIEGO ; ERIC JAN KEROVUO ; CALLEN WALTER SAN DIEGO ; CALLEN WALTER RICHARDSON ; FREY GERHARD SAN DIEGO ; MALGORZATA MARIA ; KEVIN ANTHONY SLUPSKA ; KEROVUO JANNES ; KEROVUO JANNE SAMULI ; KEROVUO JANNE S SAN DIEGO ; JAY MILTON MATHUR ; JANNE SAMULI GRAY ; ILLER CARL ; GRAY KEVIN SAN DIEGO ; GRAY KEVIN ANTHONY ; GERHARD SHORT ; MATHUR ERIC JAN ; MATHUR ERIC J CARLSBAD ; O'DONOGHUE EILEEN ; O DONOGHUE EILEEN SAN DIEGO ; MILLER CARL RALEIGH ; TOBY FREY ; SLUPSKA MATGORZATA SAN DIEGO ; SLUPSKA MALGORZATA MARIA ; SHORT JAY MILTON ; SHORT JAY M RANCHO SANTA FE ; TOBY RICHARSON ; MILLER CARL CARLSBAD ; ERIC J MATHUR ; SLUPSKA MALGORZATO MARIA ; MATHOR ERIC JAN ; KAZAOKA MARTIN SAN DIEGO ; KEROVUO JANNE

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A01H1/00 A01H3/00 A01H5/00 A01H5/10 A01K67/027 A21D10/00 A21D10/02 A21D13/00 A21D2/00 A21D2/24 A21D2/26 A21D8/00 A21D8/02 A21D8/04 A23J3/20 A23K1/00 A23K1/14 A23K1/16 A23K1/165 A23K1/17 A23K1/18 A23K20/147 A23K20/189 A23L1/00 A23L1/03 A23L1/09 A23L1/10 A23L1/105 A23L1/227 A23L1/277 A23L1/29 A23L1/30 A23L1/305 A23L1/48 A23L2/66 A23L2/84 A23L29/30 A23L33/125 A23L33/18 A23L33/20 A61K31/713 A61K38/00 A61K38/43 A61K38/46 A61K38/47 A61K48/00 A61K8/64 A61K8/66 A61P1/02 A61Q11/00 A61Q19/10 B02C9/00 C02F3/34 C07C29/09 C07C31/08 C07H15/04 C07H21/00 C07H21/02 C07H21/04 C07K1/00 C07K14/00 C07K14/195 C07K16/40 C07K17/00 C07K19/00 C08B30/04 C08L3/02 C09K8/02 C09K8/035 C09K8/20 C09K8/524 C09K8/58 C09K8/582 C10L1/02 C11D17/06 C11D17/08 C11D3/00 C11D3/386 C11D7/32 C11D7/42 C12C1/00 C12C11/00 C12C5/00 C12C7/00 C12C7/04 C12G3/00 C12G3/02 C12G3/04 C12M1/00 C12N1/00 C12N1/12 C12N1/15 C12N1/19 C12N1/20 C12N1/21 C12N11/00 C12N11/02 C12N11/08 C12N11/14 C12N11/16 C12N15/00 C12N15/09 C12N15/10 C12N15/11 C12N15/113 C12N15/52 C12N15/56 C12N15/63 C12N15/82 C12N5/04 C12N5/06 C12N5/10 C12N5/16 C12N5/20 C12N9/00 C12N9/10 C12N9/24 C12N9/26 C12N9/28 C12N9/30 C12N9/32 C12N9/34 C12N9/44 C12N9/48 C12P1/00 C12P19/02 C12P19/04 C12P19/12 C12P19/14 C12P19/16 C12P19/20 C12P19/22 C12P19/24 C12P19/34 C12P21/02 C12P21/04 C12P21/06 C12P21/08 C12P7/02 C12P7/06 C12P7/10 C12P7/14 C12Q1/02 C12Q1/40 C12Q1/68 C12S11/00 C12S3/00 C12S3/02 C12S3/08 C12S3/10 C12S3/12 C12S9/00

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A61K C07H C12N C12P (Subclass/Invention)

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CPC: A61K38/00 C12P19/16 C12P19/20 Y02E50/16 A21D8/042 C11D3/386 C12C5/004 C12N9/2428 C12N9/2451 C12Y302/01001 C12Y302/01002 Y02E50/17 C12Y302/01 A23V2002/00 C12N9/2411 A23K10/14 A23K20/189 A23L29/06 A23L29/35 C12P19/04 C12N9/2417 C12N9/2414 C12P19/14

European class: A21D8/04B A23K1/165B A23K1/165B1 A23L1/03E A23L1/09D C11D3/386 C12C5/00C C12N9/24A2B1 C12N9/24A2B1A C12N9/24A2B1A2 C12N9/24A2B1C C12N9/24A2F C12N9/26 C12N9/44 C12P19/14 C12P19/16 C12P19/20 C12Y302/01001 C12Y302/01002 K61K38/00 Y02E50/16 Y02E50/17

US class: 1/1 162/158 162/174 162/174S 162/5 162/5S 162/72 162/72S 166/310 424/50 424/94.1 424/94.61 424/94.610 424/94.610S 426/11 426/11S 426/12 426/18 426/18S 426/2 426/20 426/20S 426/28 426/28S 426/29 426/2S 426/43 426/46 426/46S 426/48 426/48P 426/48S 426/49 426/52 426/53 426/54 426/549 426/592 426/63 426/64 426/656 426/7 426/7S 435/105 435/105S 435/155 435/155S 435/161 435/161P 435/161S 435/162 435/174 435/174S 435/183 435/183S 435/189 435/189P 435/196 435/196S 435/199 435/199S 435/200 435/201 435/201P 435/201S 435/202 435/202S 435/203 435/204 435/204S 435/205 435/205S 435/209 435/209S 435/210 435/212 435/243 435/243S 435/252.3 435/252.300S 435/252.31 435/252.310S 435/252.33 435/252.330S 435/252.34 435/252.340S 435/252.35 435/252.350S 435/254.11 435/254.110S 435/254.2 435/254.200S 435/262 435/263 435/263S 435/264 435/264S 435/267 435/267S 435/274 435/275 435/276 435/277 435/278 435/280 435/320.1 435/320.100S 435/325 435/325S 435/348 435/348S 435/354 435/354S 435/358 435/365 435/371 435/4 435/41 435/410 435/410S 435/419 435/419S 435/440 435/456 435/456S 435/6 435/6.13 435/6.130P 435/6.130S 435/6.14 435/6.140S 435/6.15 435/6.150P 435/6.150S 435/6.19 435/6.190P 435/69.1 435/69.100S 435/691 435/6P 435/6S 435/91.1 435/93 435/94 435/95 435/96 435/96P 435/98 435/99 435/99P 435/99S 507/101 507/101S 510/320 510/320S 510/392 510/392S 530/350 530/388.26 530/388.260 530/388.260S 536/23.1 536/23.100P 536/23.2 536/23.200S 536/23.4 536/23.5 536/23.6 536/23.7 536/232 536/24.3 536/24.300S 536/24.31 536/254.11 536/254.2 702/20 702/20S 800/18 800/18P 800/284 800/284P 800/284S 800/295 800/295S 800/298 800/298P

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Forward Citations: WO15156340, WO15050724, WO15021600, WO14204596, WO14200658, WO14200657, WO14200656, WO14007921, WO13116175, WO12169997, WO11103549, WO11091260, WO11091260, WO11085334, WO11084757, WO11082429, WO11082425, WO11080354, WO11080353, WO11080352, WO11049945, WO11017093, WO10133644, WO10133644, WO10123626, WO10123625, WO10115028, WO10115021, WO10104675, WO10099134, WO10059413, WO10059413, WO10051288, WO09149395, WO09149395, WO09098229, WO09098229, WO09061381, WO09061381, WO08112729, WO08112729, WO08112727, WO08112727, WO08088046, WO08080093, WO08076747, WO07134207, WO07134207, WO06125068, WO06125068, WO06066596, WO06003461, WO06003461, WO05066338, WO05042758, WO05003339, WO05001064, WO05001064, WO04113551, WO04111217, WO04111217, WO04091544, WO04091544, US9672126, US9630997, US9630988, US9587159, US9540668, US9506047, US9506046, US9486591, US9394533, US9394532, US9328393, US9273297, US9271626, US9249400, US9163269, US9139822, US9090887, US9062295, US9040279, US9040278, US8975056, US8962283, US8916369, US8900848, US8852912, US8815560, US8809032, US8809031, US8753859, US8722381, US8663966, US8591969, US8562969, US8551754, US8545907, US8540978, US8507244, US8507243, US8470309, US8470308, US8460916, US8440444, US8435577, US8383384, US8343747, US8338131, US8334118, US8323945, US8318451, US8318157, US8278088, US8263381, US8236545, US8222035, US8206966, US8178336, US8156662, US8153412, US8143048, US8137944, US8129511, US8129119, US8105801, US8093453, US8039241, US8030050, US8021705, US7998709, US7975398, US7919681, US7915020, US7914993, US7883883, US7882646, US7858352, US7855322, US7833771, US7833770, US7816108, US7803604, US7785855, US7781201, US7776576, US7767057, US7759093, US7727726, US7685737, US7666650, US7666633, US7659102, US7635799, US7618795, US7579146, US7560126, US7557262, US7485423, US7435562, US7371552, US7306935, US7169257, US7166453, US7153818, US7102057, US2016186041, US2015308046, US2015252341, US2015225466, US2015037319, US2014134443, US2013231471, US2013197104, US2013159253, US2013149770, US2013143295, US2012315675, US2012172275, US2012122183, US2012100577, US2012054915, US2012045822, US2012040412, US2011283421, US2011214308, US2011183032, US2011171693, US2011160058, US2011105376, US2011104141, US2011039308, US2010323061, US2010273154, US2010215617, US2010209995, US2010209878, US2010209387, US2010172863, US2010160622, US2010139699, US2010139116, US2010063265, US2010047392, US2010015686, US2009320831, US2009305935, US2009305360, US2009288232, US2009226569, US2009221041, US2009047715, US2009047382, US2008299256, US2008289066, US2008213862, US2008199918, US2008193982, US2008145903, US2008110043, US2008104858, US2008079514, US2008014616, US2007184472, US2007163316, US2007107859, US2007056053, US2007031943, US2006254080, US2006234280, US2006230473, US2006223081, US2006200877,

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Abstract:
Source: US2003013172A The invention relates to alpha amylases and to polynucleotides encoding the alpha amylases. In addition methods of designing new alpha amylases and methods of use and purification thereof are also provided. The alpha amylases have increased activity and stability at increased pH and temperature.

0) US2014084165A – SELECTABLE LENS BUTTON FOR A HAZARD DETECTOR AN...

7) Family number: 56033950 (US2014084165A) © PatBase

Title: SELECTABLE LENS BUTTON FOR A HAZARD DETECTOR AND METHOD THEREFOR

Priority:

CA20142918662	20140717	CA20162918662	20161005	US20120704437P	20120921
US20130047606	20131007	US20130047447	20131007	US20130430124	20130920
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WO16109839 A1	20160707	WO2015US68354	20151231	

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Agent(s): PIZZEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; GOWLING LAFLEUR HENDERSON LLP; SMART AND BIGGAR; BOULT WADE TENNANT; FUKAMI PATENT OFFICE PC; KILPATRICK TOWNSEND AND STOCKTON LLP; VAN COURT AND ALDRIDGE LLP; ANNIS DAVID C ET AL; WEIGHT CLARK ET AL; WEIGHT CLARK F ET AL; VAN COURT ANDREW ET AL; ALDRIDGE JEFFREY C ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A47G29/14 B23P19/00 F16M13/02 F24F11/00 G01D11/24 G01J5/02 G01J5/04 G01J5/08 G01L19/14 G01N21/84 G01V8/10 G05B15/02 G05B19/042 G05F1/46 G06F1/32

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Abstract:
Source: US2014084165A According to one embodiment, a hazard detector includes a front casing coupled with a back plate to define a housing having an interior region. The hazard detector also includes a passive infrared sensor device that is disposed within the interior region and that is positioned to face a room within which the hazard detector is positioned so as to detect objects within the room. The hazard detector additionally includes a Fresnel lensing component that is disposed on an exterior of the front casing and that is positioned in front of the passive infrared sensor device to direct infrared radiation onto the passive infrared sensor device. The Fresnel lensing component is configured to be inwardly pushable by a user to cause contact with a switch positioned therebehind so that input is provided to the hazard detector by the user.

0) US2001034583A – SPEEDOMETER FOR A MOVING SPORTSMAN

8) Family number: 29953458 (US2001034583A) © PatBase

Title: SPEEDOMETER FOR A MOVING SPORTSMAN

Priority:

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW

International class (IPC 8–9): A43B3/00 A43B5/06 A61B5/00 A61B5/024 A61B5/08 A61B5/103 A61B5/11 A61B5/145 A61B5/22 A61F5/14 A63B24/00 A63B71/06 A63C11/00 A63C5/06 A63F13/798 A63K3/00 G01B21/00 G01B21/16 G01B5/02 G01B5/10 G01B7/004 G01C17/38 G01C21/16 G01C22/00 G01C22/02 G01C5/00 G01C9/00 G01G19/44 G01G23/00 G01G23/37 G01G7/00 G01G9/00 G01K13/00 G01L1/00 G01L1/04 G01L1/16 G01L1/22 G01L3/24 G01L5/00 G01P1/12 G01P11/00 G01P13/00 G01P15/00 G01P15/02 G01P15/08

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A63B24/00 G01S11/00 (Core/Non–invention)

International class (IPC 1–7): A63B71/06 G01C22/00 G01L1/00 G01L3/00 G01L3/24 G01L5/00 G01P11/00 G01P13/00 G01P3/00 G01P3/50 G01P5/00 G01P7/00 G01P9/00 G04F1/00 G04F10/00 G04F8/08 G06F11/00 G06F11/30 G06F11/32 G06F15/00 G06F17/00 G06F17/40 G06F19/00 G08C19/06 H04N17/00

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European class: A42B3/04B6 A42B3/04B6D A43B3/00 A43B3/00E A43B5/06 A61B5/00B A61B5/11 A61B5/11M A61B5/11N A61B5/11P2 A61B5/11W A61B5/68B1D3 A61B5/68B3D1 A63B23/035G A63B24/00 A63B24/00A A63B24/00A1 A63B24/00E A63B24/00G A63B69/00U A63B69/18 A63B69/18C A63B71/06 A63B71/06B A63B71/06D2 A63B71/10 A63C11/00 A63C17/26 A63C5/06 G01C21/10 G01C21/16 G01C21/20 G01C22/00B G01C22/00P G01C22/02 G01G19/44 G01G23/00 G01G23/37W G01P1/06 G01P1/12C G01P15/00 G01P15/08L G01P15/18 G01P3/36C G01P3/42 G01P3/50 G01P3/62 G01P5/08 G01S11/14 G01S17/02C G01S17/58 G01S19/19 G04F8/08 G06Q10/08 G06Q10/083 G06Q10/0833 G07C1/10 G07C1/22 G07C1/24 G08G1/20 G08G9/00 H04N7/18D2 H04W4/02P4 K61B5/113 K61B5/11M K61B5/11N K61B5/11N2 K61B5/11R K61B5/11S2 K61B503/10 K61B560/04B2 K61B562/02C K61B562/08 K61B562/24B K63B208/12 K63B208/14 K63B220/05 K63B220/12 K63B220/13 K63B220/14 K63B220/16 K63B220/18 K63B220/20 K63B220/30 K63B220/34 K63B220/40 K63B220/44 K63B220/51 K63B220/52 K63B220/53 K63B220/56 K63B220/62 K63B220/64 K63B220/74 K63B220/80A K63B220/80C K63B220/80F K63B220/80G K63B220/80M K63B220/83A K63B220/83C K63B225/15 K63B225/50 K63B230/01 K63B230/75 K63B24/00E1 K63B24/00G3 K63B244/08 K63B244/10 K63B244/19 K63B244/24 K63B5/00 K63B69/00 K63B69/00G K63B69/00J K63B69/00K K63B69/00U K63B69/16 K63B69/18 K63B69/18M K63B69/26 K63B71/06 K63B71/06B K63B71/06C K63B71/06D3 K63B71/06D4 K63B71/06D6B2 K63C203/18 K63C203/24 K63C5/03 S01S11/14 S01S15/60 T04N5/38 T04W4/04B

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Abstract:
Source: US2001034583A The invention detects the loft time and/or speed of a vehicle, such as a sporting vehicle, during activities of moving and jumping. A loft sensor detects when the vehicle leaves the ground and when the vehicle returns to the ground. A microprocessor subsystem converts the sensed information to determine a loft time. A display shows the recorded loft time to a user of the system. In addition, a speed sensor can detect the vehicle's speed for selective display to the user. The invention is particularly well−suited to sporting activities such as snowboarding where users loft into the air on ski jumps and catch "air" time but have no quantitative measure of the actual time lapse in the air. Therefore, users in skiing can use invention to record, store, and playback selected information relating to their sporting day, including the total amount of "air" time for the day and information such as dead time, i.e., time not spent on the slopes.

0) US2012083705A – ACTIVITY MONITORING SYSTEMS AND METHODS OF OPER...

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Title: ACTIVITY MONITORING SYSTEMS AND METHODS OF OPERATING SAME

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Probable Assignee: FITBIT INC

Assignee(s):(std)**:** FITBIT INC ; PARK JAMES ; FRIEDMAN ERIC NATHAN ; YUEN SHELTEN GEE JAO ; FLIPBELT CO LTD

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Inventor(s):(std)**:** ALBERT ERIC VAN ; AXELY ANDREW COLE ; AXLEY ANDREW COLE ; BARINGER WILLIAM B ; BARRY BURTON ; BILODEAUX DEWEY AISLINN ABIGAIL ; BRUMBACK CHRISTINE BOOMER ; CARVALHO SHIMONA AVELINA ; CHOUDHARY NICHIKETA ; CHRISTINE BRUMBACK ; CLARK CHRIS ; DAVE KNIGHT ; ELLIOT THOMAS SAMUEL ; ERIC FRIEDMAN ; FRIEDMAN ERIC NATHAN ; GLICK SARA YAEL ; HEIKO

PANTHER ; JAMES PARK ; JAYSON MESSENGER ; KNIGHT DAVE ; KNIGHT DAVID ; LEE HANS CHRISTIANSEN ; MARTINEZ MARK EMANUEL ; MYERS NICHOLAS ; NICHOLAS MYERS ; PANTHER HEIKO GERNOT ALBERT ; PARK JAMES ; RICHARDS PETER W ; SHELTEN YUEN ; TIMOTHY ROBERTS ; VENKATRAMAN SUBRAMANIAM ; YUEN SHELTEN GEE JAO ; YUEN SHELTON GEE JAO ; ZACHARIAH LORD WASSON II ; SHELTEN GEE JAO YUEN ; NICHIKETA CHOUDHARY ; JACOB ANTONY ARNOLD ; DAVID KNIGHT ; ALLISON MAYA RUSSELL ; YUEN SHELTEN ; YUAN SHELDON JIE JIAO ; WILCOX KEELINE BURDICK ; ROBERTS TIMOTHY ; PANTHER HEIKO ; MOLETTIERE PETER ANDREW ; MARTINEZ MARK MANUEL ; HONG JUNG OOK ; FRIEDMAN ERIC ; FRANCISCO MICHAEL JOSEPH ; BURTON BARRY ; BRUMBACK CHRISTINE ; BERLINGER MICHAEL HANS ; WASSON II ZACHARIAH LORD ; RUSSELL ALLISON MAYA ; ARNOLD JACOB ANTONY ; MESSENGER JAYSON

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NEIL A; MARTINE PENILLA GROUP LLP; WEAVER AUSTIN VILLENEUVE AND SAMPSON LLP; WEAVER AUSTIN VILLENEUVE AND SAMPSON; BUCKLEY MASCHOFF AND TALWALKAR LLC; NICHOLSON; WEBSTER AND ELLIOTT LLP; WEAVER AUSTIN VILLENEAUVE AND SAMPSON LLP; NICHOLSON DE VOS WEBSTER AND ELLIOTT LLP; KNOBBE MARTENS OLSON AND BEAR LLP

International class (IPC 8–9):

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A45C13/42 A61B5/00 A61B5/0205 A61B5/021 A61B5/024 A61B5/0245 A61B5/0402 A61B5/05 A61B5/08 A61B5/11 A61B5/145 A61B5/1455 A61B5/22 A63B24/00 B42D15/00 G01C21/20 G01C22/00 G01P15/00 G01S5/02 G06F17/30 G06F19/00 G06F3/00 G08B21/02 G08B21/18 G08C17/02 G09F3/00 G09F3/04 G09F3/14 H01L41/22 H02J7/34 H04L29/08 H04M1/725 H04W4/00 H04W4/08 H04W76/02 (Advanced/Non–invention)

CPC:

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European class: A61B5/00B A61B5/11Q A61B5/22B2 A61B5/68B3L A63B24/00G A63B71/06F K61B5/0205B K61B5/11M K61B560/02B4 K61B560/02F K61B560/04J K61B562/02C K63B220/72 K63B220/73 K63B230/06 K63B230/50 K63B230/70 K63B230/75 S06F19/34A S06F19/34N

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Classification Explorer

Cited documents: WO16003269 A1, WO15127067 A1, WO15073747, WO14091424 A3, WO14091424 A2, WO13169755, WO13093011, WO13040674, WO12171032 A2, WO12170924 A2, WO12170587, WO12170586 A2, WO12170366 A1, WO12061438 A2, WO11139671 A2, WO09042965 A1, WO08038141 A2, WO07102134 A2, WO06090197 A1, WO06055125 A1, WO0211019 A1, USD685570 S1, USD555896 S1, USD548457 S1, US9596999 BB, US9456787 BB, US9426769 BB, US9420083 BB, US9410979 BB, US9409052 BB, US9402552 BB, US9392946 BA, US9389057 BB, US9383820 BB, US9374279 BB, US9307917 BB, US9286789 BB, US9282902 BB, US9241646 BB, US9237855 BB, US9198604 BB, US9196964 BB, US9168419 BB, US9167991 BB, US9137849 BA, US9122250 BB, US9113823 BB, US9113795 BB, US9113794 BB, US9110498 BB, US9098991 BB, US9089760 BB, US9081534 BB, US9079060 BB, US9073671 BB, US9050488 BB, US9049998 BB, US9047648 BA, US9044171 BB, US9044150 BB, US9044149 BB, US9042971 BB, US9035825 BB, US9031812 BB, US9026927 BB, US9017221 BB, US9014790 BB, US9013351 BB, US9005129 BB, US8998815 BB, US8976062 BB, US8968195 BB, US8965730 BB, US8961414 BB, US8961413 BB, US8956303 BB, US8954290 BB, US8954135 BB, US8949070 BA, US8948832 BB, US8947239 BA, US8945017 BB, US8944958 BA, US8936552 BB, US8935119 BB, US8920332 BB, US8919019 BB, US8909543 BB, US8903671 BB, US8896526 BA, US8892401 BB, US8876738 BA, US8868377 BB, US8847988 BB, US8825445 BB, US8792981 BB, US8787006 BB, US8784271 BB, US8776418 BA, US8764651 BB, US8762101 BB, US8762059 BA, US8744803 BB, US8742325 BA, US8738323 BB, US8738321 BB, US8738118 BB, US8737986 BB, US8734296 BA, US8690578 BA, US8686685 BB, US8684900 BB, US8670953 BB, US8660355 BB, US8653927 BB, US8641612 BB, US8638228 BB, US8634796 BB, US8630798 BB, US8630741 BA, US8615377 BA, US8610638 BB, US8600457 BB, US8597093 BB, US8583402 BB, US8579827 BA, US8562489 BB, US8554297 BB, US8548770 BB, US8543351 BB, US8543185 BB, US8533620 BB, US8533269 BB, US8527038 BB, US8497658 BB, US8487771 BB, US8482909 BB, US8475367 BA, US8463577 BB, US8463576 BB, US8462591 BA, US8446275 BB, US8444578 BB, US8441356 BA, US8437980 BB, US8437824 BB, US8417300 BB, US8408436 BB, US8398546 BB, US8390249 BB, US8386042 BB, US8386008 BB, US8365073 BB, US8364250 BB, US8360904 BB, US8346328 BB, US8321004 BB, US8311770 BB, US8311769 BB, US8306508 BA,

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Abstract:
Source: US2012083705A The present inventions, in one aspect, is an activity monitoring system comprising a fixture having size/shape adapted to couple to a location on the user's body and a particular signature; and a portable monitoring device adapted to detect the fixture's particular signature. The monitoring device includes a housing that is adapted to engage the fixture; activity sensors, disposed in the housing, to detect activity of the user and to generate data which is representative of the activity of the user; and processing circuitry, disposed in the housing, to calculate an activity−related quantity of the user using the data which is representative of the activity of the user, wherein the processing circuitry: determines the monitoring device is engaging the fixture by detecting the fixture's particular signature, and, in response thereto, calculates the activity−related quantity using data from a set of the activity sensors.

0) US2003231485A – TUBULAR ELECTRO–LUMINESCENT PANEL(S) LIGHT DEVI...

10) Family number: 28290889 (US2003231485A) © PatBase

Title: TUBULAR ELECTRO–LUMINESCENT PANEL(S) LIGHT DEVICE

Priority:

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Family:

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Probable Assignee: TORMACH LLC

Assignee(s):(std)**:** CHIEN TAENG LU ; CHIEN TSENG L ; CHIEN TSENG LU ; TORMACH LLC ; WALLAGE RAYMOND ROGER

Inventor(s):(std)**:** WALLAGE RAYMOND ROGER ; CHIEN TSENG LU ; CHIEN TSENG L ; CHIEN TAENG LU

Inventor(s): CHIEN TSENG

Agent(s): BACON AND THOMAS PLLC; ROBERT

International class (IPC 8–9)**:** A41D27/08 A41G1/00 A42B1/24 A43B3/00 A45C15/06 B60Q1/26 B60Q3/02 B60R11/00 B60R13/00 C10G1/00 C12M1/00 C12M1/06 C12M1/12 C12M1/34 C12M3/00 F21K2/00 F21K9/232 F21K99/00 F21L13/00 F21L14/00 F21L4/00 F21L4/02 F21L4/08 F21S10/00 F21S10/02 F21S10/06 F21S2/00 F21S4/00 F21S6/00 F21S8/00 F21S8/08 F21S9/02 F21V1/00 F21V1/10 F21V11/00 F21V13/00 F21V13/02 F21V14/00 F21V14/02 F21V14/06 F21V14/08 F21V15/01 F21V17/00 F21V17/02 F21V19/00 F21V19/02 F21V21/00 F21V21/005 F21V21/08 F21V21/092 F21V21/14 F21V21/22 F21V21/26 F21V21/30 F21V23/00 F21V23/02 F21V23/04 F21V23/06 F21V25/02 F21V29/00 F21V29/502 F21V29/70 F21V3/00 F21V3/02 F21V31/00 F21V33/00 F21V5/00 F21V5/04 F21V7/00 F21V7/04 F21V8/00 F21V9/00 F21V9/16 G01J5/00 G01S3/786 G02B27/22 G02F1/13 G02F1/1335 G02F1/13357 G03B1/00 G03B15/03 G03B19/18 G03B21/00 G03B21/14 G03B21/20 G03B23/00 G03B29/00 G03B3/00 G03H1/22 G04B19/04 G04B19/30 G04B37/12 G04B47/00 G04C10/00 G04C19/00 G04G99/00 G06F1/26 G06K9/00 G06T7/00 G06T7/20 G08B13/24 G09F13/18 G09F13/22 G09F23/00 G09F23/04 G09F9/33 G09G3/30 G09G3/32 H01L21/00 H01L21/68 H01R11/00 H01R13/66 H01R25/00 H01R27/00 H01R3/00 H01R33/00 H01R33/009 H01R39/00 H02G3/14 H02J4/00 H02J7/00 H02J7/02 H02M1/00 H04N5/225 H04N5/232 H04N5/235 H04N5/247 H04N5/33 H04N5/76 H04N7/18 H04N9/31 H05B33/08 H05B37/02 H05B41/30 (Advanced/Invention); B60R13/02 F21S2/00 F21V1/10 F21V21/22 F21V21/29 F21V21/30 F21V23/04 F21V23/06 F21V33/00 F21V8/00 F21V9/08 F21W121/00 F21W131/30 F21Y101/00 F21Y101/02 G02B5/32 G09F13/22 H01H9/18 H01J7/44 H01R103/00 H01R13/713 H01R24/76 (Advanced/Non–invention); A42B1/00 A43B3/00 A45C15/00 B60Q3/00 B60R11/00 B60R13/00 F21L4/00 F21S4/00 F21V1/00 F21V17/00 F21V21/00 F21V21/005 F21V21/08 F21V21/14 F21V23/00 F21V23/04 F21V3/00 F21V33/00 G03B21/00 G03B21/14 G09F13/22 H01R3/00 H01R33/00 H05B37/02 (Core/Invention); B60R13/02 G02B5/32 (Core/Non–invention)

International class (IPC 1–7)**:** F21V21/00 F21V21/08 F21V9/16 G01D11/28 G02B6/04 H01J1/62 H01R11/00

CPC: A42B1/242 A41D27/085 A42B1/244 A43B1/0036 A43B3/0005 A45C15/06 B60Q1/26 F21S2/00 G09F13/22 H05B37/0245 F21V19/00 F21V19/0015 F21V19/003 G03B15/03 H05B37/0218 H05B37/0236 Y02B20/42 F21V33/006 G02B6/0021 G02B6/0045 G09F23/00 H01H2009/186 H02G3/14 A43D999/00 B60R11/00 B60R13/00 B60R2011/0063 B60R2013/0287 H04M1/05 H04M1/6058 F21S10/066 F21V23/0407 H05B33/0857 A43C9/02 F21V29/20 F21V19/02 F21V1/00 F21V3/00 H01R33/06 F21V23/045 F21V5/048 F21V7/0066 F21V29/70 G03B21/2086 Y10T307/406 H05B33/0842 F21S10/007 F21V14/003 F21V14/006 G06F1/266 H02J4/00 H02J7/0042 H02J7/007 F21S2/005 F21S8/038 F21L4/00 F21L2001/00 F21S4/10 F21S4/20 A43B3/001 G03B21/20 F21V3/026 F21V14/08 F21V23/023 F21V33/0048 H01R33/92 F21S6/003 H01R13/6675 F21V23/005 F21V21/092 G09F13/18 G09F2013/222

F21V15/01 F21V33/00 F21V33/0024 F21V33/0056 H01R13/6691 H01R13/713 H01R24/76 H01R25/006 H01R2103/00 F21V14/06 F21V33/004 H02J2007/0062 F21V13/02 H02J7/0045 H02J7/027 G06K9/00369 G06K9/00771 G01J5/0025 G08B13/2491 G03B21/006 G02B27/22 G03B35/24 F21V23/00 H05B33/08 F21S9/035 H02J7/00 H05B37/00 G02F1/1313 H04N5/2256 H04N5/247 F21S6/004 H02J7/0027 H02J7/02 F21Y2113/002 F21S10/002 F21V21/29 F21V29/00 Y10S362/806 F21V17/002 F21K9/23 F21Y2107/40 F21V3/023 G03B21/142 G03B21/2046 G03B23/00 F21Y2115/30 F21Y2103/37 H01R33/09 A61L9/03 A61L2209/12 F21V33/0004 F21S10/00 F21V9/00 F21V9/12 F21Y2105/00 F21Y2111/00 H05B33/0803 F21S10/06 F21V1/10 G09F9/33 G09F19/12 G03B21/001 G03B21/26 G03B23/10 F21Y2113/13 H02J7/022 F21Y2103/33 F21Y2113/10 F21S4/28 F21S10/02 G09F23/04 F21V11/08 F21V23/003 H04N9/315 G01S3/7864 A41G1/005 G02B6/0008 G02B6/001 F21V23/0471 F21V23/02 F21Y2103/10 F21Y2103/00 H04N5/23206 G04B47/02 G06T2207/30232 H04N5/2252 H04N5/332 H04N5/2354 H04N5/23241 H04N5/76 F21K9/13 F21S9/02 F21Y2101/02 G06T7/004 F21V3/02 F21V17/02 F21K9/235 F21V19/006 G03B21/2053 G03B21/2033 G03B21/206 G03B21/145 G03B21/208 F21K9/60 F21V5/04 F21W2131/30 G04B19/30 B60Q3/78 F21W2131/109 F21Y2101/00 H04N5/2257 G03B29/00 F21V14/00 F21V5/00 F21V7/00 F21V11/00 H02J7/0047 H02J2007/0059 F21V29/502 F21K9/65 H04N7/181 F21S6/002 F21S10/023 F21S10/063 F21V23/0442 F21K9/232 F21K9/238 F21V14/02 F21V23/006 H02J7/0052 C12M21/12 C10G1/00 C12M23/06 C12M23/46 C12M27/02 C12M27/20 C12M41/40 G08B13/19619 G08B13/19636 G08B13/19656 G08B13/19695 C10G32/00 F21S8/035 F21S9/022 F21V9/08 F21V21/08 F21V21/14 F21V21/22 F21V21/30 F21V23/04 F21V23/0492 F21V23/06 F21V33/0052 F21W2121/00 F21Y2115/10 G06T7/70 H04N5/33 H04N7/183 Y10S362/80

European class: A41D27/08B A41G1/00B8 A42B1/24B A43B1/00C10 A43B3/00E A43B3/00E10 A43D999/00 A45C15/06 A61L9/03 B60Q1/26 B60Q3/02Q B60R11/00 B60R13/00 F21K9/00 F21K9/135 F21S10/00 F21S10/00A F21S2/00 F21S4/00E F21S4/00L F21S4/00L6 F21S8/03G1 F21S8/03T F21S9/02 F21S9/02E F21V14/02 F21V21/08 F21V21/14 F21V23/04 F21V29/00 F21V33/00A F21V9/00 F21V9/08 F21V9/12 G02B27/22 G02B6/00L4E G02B6/00L4L G02B6/00L6O4S G03B21/00 G03B21/20 G03B35/24 G09F13/22 G09F19/12 G09F23/00 G09F9/33 H01R13/66D10 H01R25/00D H01R33/06 H01R33/09 H02G3/14 H04M1/05 H04M1/60T2B H05B33/08D K61L209/120 L60R11/00R4A15 L60R13/02R R21S10/06 R21S2/00A R21S8/03G1 R21V1/10 R21V21/22 R21V21/29 R21V21/30 R21V23/04S R21V23/04S8 R21V33/00B R21V9/08 R21W121/00 R21W131/109 R21Y101/02 R21Y103/00 R21Y103/025 R21Y105/00 R21Y111/00 S02B6/00L6I4S4 T01H9/18E T01R103/00 T01R13/66D10 T01R13/713 T01R24/76 Y02B10/30

US class: 1/1 29/595 29/825 307/31 313/498 313/511 313/512 315/155 315/160 315/250 315/287 315/314 315/317 315/32 315/86 340/472 345/77 348/142 348/143 348/151 348/159 348/169 348/207.1 348/372 348/373 348/744 348/E5.024 348/E5.026 348/E5.043 348/E5.09 348/E7.085 348/E9.025 349/5 349/62 352/133 353/10 353/101 353/103 353/119 353/122 353/43 353/62 353/7 353/85 353/87 353/95 359/15 359/32 362/101 362/103 362/104 362/108 362/109 362/135 362/145 362/149 362/157 362/158 362/183 362/184 362/190 362/20 362/219 362/221 362/225 362/23 362/23.01 362/23.19 362/231 362/233 362/234 362/235 362/238 362/241 362/249 362/249.01 362/249.02 362/249.03 362/249.06 362/249.07 362/249.09 362/249.11 362/249.12 362/250 362/251 362/253 362/257 362/259 362/267 362/269 362/276 362/277 362/280 362/281 362/285 362/294 362/295 362/296.01 362/298 362/3 362/311 362/311.01 362/311.02 362/311.03 362/311.13 362/338 362/34 362/35 362/362 362/369 362/372 362/375 362/382 362/390 362/394 362/397 362/404 362/421 362/427 362/457 362/487 362/555 362/562 362/565 362/603 362/640 362/641 362/642 362/643 362/644 362/645 362/646 362/647 362/648 362/659 362/8 362/800 362/806 362/84 362/85 362/86 362/87 362/88 362/92 362/95 362/96 362/97.1 363/178 368/10 368/223 368/227 368/242 368/278 368/67 368/80 368/82 368/84 396/155 439/11 439/131 439/165 439/31 439/490 439/502 439/536 439/6 439/638 439/8 713/300

Classification Explorer

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Abstract:
Source: US2003231485A A tubular Electro−Luminescent panel(s) light device offer a desired bending directions with super brightness basing on certain width of panel incorporated proper invertor system. The said panel(s) with much narrow width than tube means to allow the panel(s) can be bend at any direction and angle within the tube means to offer a desired light effects. The said panel(s) can be flat or twisted within the tube means which may have the desired colored, transparency, wall thickness, diameter, shape, length for requirement. The said device may incorporated with non−elastic means, magnetic means, tube holder, sensor means, Integrated circuit to add a lot of desired variety features.

11) Family number: 48783676 (US2014176565A) © PatBase

Title: COMPUTER IMPLEMENTED METHODS AND SYSTEMS FOR GENERATING VIRTUAL BODY MODELS FOR GARMENT FIT VISUALISATION

Priority:

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US9665906 BB	20170530	US20160003312	20160121	
WO12110828 A1	20120823	WO2012GB50365	20120217	

Probable Assignee: METAIL LTD

Assignee(s):(std)**:** METAIL LTD ; DOWNING JIM ; TOWNSEND JOE ; ROBERTSON DUNCAN ; TROTT NIKKI ; HERBERT EDWARD ; UNADKAT ANOOP ; WARREN TOM ; ADEYOOLA TOM ; BOLAND ROBERT ; CLAY EDWARD ; BOUCHER TOM ; BROWN NICK ; DAY NICK

Assignee(s): METAIL LIMITED

Inventor(s):(std)**:** ATHORNE THOMAS ; BAGNALL RICHARD ; BAHAMONDES ALVERO ; BARNES TOM ; BOLAND ROBERT ; BOUCHER TOM ; BROWN NICK ; CHEN YU ; CLAY EDWARD ; DALZIEL TOM ; DAY NICK ; DOWNING JIM ; ADEYOOLA TOM ; ALLARD REBECCA ; HERBERT EDWARD ; HOSKEN FLEUR ; DOGANIS GIORGOS ; MAHER MICHAEL ; MARCO GALA ; MARKS NIC ; MCCALLUM MAIRI ; MILLER RAY ; MURPHY ROB ; NIKOLOVA DIANA ; RAVI SHRIVIDYA ; SHIN DONGJOE ; TOWNSEND JOE ; TROTT NIKKI ; UNADKAT ANOOP ; WADE ANTON ; WALTER SARAH ; WARREN TOM ; ROBERTSON DUNCAN ; ROGERS GARETH

Inventor(s): SARAH WALTER ; YU CHEN ; SHRIVIDYA RAVI ; THOMAS ATHORNE ; TOM ADEYOOLA ; TOM BARNES ; TOM BOUCHER ; TOM DALZIEL ; TOM WARREN ; RAY MILLER ; REBECCA ALLARD ; RICHARD BAGNALL ; ROB MURPHY ; ROBERT BOLAND ; NIC MARKS ; NICK BROWN ; NICK DAY ; NIKKI TROTT ; MICHAEL MAHER ; MAIRI MCCALLUM ; DONGJOE SHIN ; JIM DOWNING ; JOE TOWNSEND ; ALVERO BAHAMONDES ; ANOOP UNADKAT ; ANTON WADE ; DUNCAN ROBERTSON ; EDWARD CLAY ; EDWARD HERBERT ; FLEUR HOSKEN ; GALA MARCO ; GARETH ROGERS ; GIORGOS DOGANIS ; DIANA NIKOLOVA

Agent(s): LANGLEY PETER JAMES; SAUL EWING LLP; ORIGIN LIMITED

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class(IPC 8–9)**:** G06F17/30 G06F3/00 G06F3/0481 G06F3/0482 G06F3/0484 G06F3/0488 G06K9/62 G06Q10/08 G06Q30/06 G06Q50/00 G06T11/00 G06T13/20 G06T13/40 G06T13/80 G06T15/00 G06T15/20 G06T17/00 G06T17/20 G06T19/00 G06T19/20 G06T7/00 G06T7/11 G06T7/194 H04N13/02 H04N5/33 (Advanced/Invention)

CPC: G06T13/40 G06T19/20 G06T2210/16 G06T2219/024 G06T2219/2012 G06T2219/2021 G06T2219/2024 G06T13/20 G06T2219/012 G06T2219/021 G06Q30/0605 G06Q50/01 G06T17/00 G06Q30/0625 G06F17/30867 G06F17/30554 G06Q10/087 G06T13/80 G06F3/04845 G06F3/04815 G06F3/04842 G06F3/005 G06F3/04883 H04N13/0207 H04N13/0282 H04N13/0271 H04N5/33 G06T2207/10012 G06T2207/10028 G06T19/006 G06Q30/0629 G06T2200/24 G06T2200/04 G06K9/6215 G06F3/0482 G06F17/30259 G06F17/30268 G06F17/30274 G06T15/205 G06T11/001 G06T17/20 G06F3/04817 G06T2207/30196 G06T2207/20212 H04N13/0203 G06Q30/0643 G06Q30/0631 G06T7/11 G06T7/194

European class: G06T19/00R

US class: 345/419 345/473 348/46 705/26.25 705/26.62 705/26.64 705/27.2

Classification Explorer

Cited documents: WO11033258 A1, WO05088484 A1, US9254081 BB, US9167155 BB, US9001118 BB, US8970585 BB, US8930012 BB, US8908928 BA, US8843402 BB, US8711175 BB, US8700477 BB, US8674989 BA, US8660902 BB, US8655053 BA, US8554523 BB, US8380586 BB, US8359247 BB, US8275590 BB, US7953648 BB, US7149665 BB, US6901379 BA, US6901379 A, US6546309 BA, US6310627 BA, US6310627 A, US5495568 A, US2007032898 AA, US2006202986 AA, US2005071257 AA, US2004044589 AA, US2003101105 AA, KR20010096903 A, JP4037383 B2, JP2000184398 A2, JP11073491 A2, EP2048588 A1, EP1959394 A2, EP1913559 A2, EP1909493 A1, CN201111142 Y, CN1932874 A, CN102044038 A, CN101620745 A, CN101079876 A,

Forward Citations: WO17051167, WO17029488, WO17029487, WO17027294, WO17004488, WO17004392, WO16097732, WO16089550, WO16001384, WO15172229, WO15160462, WO14089707, WO14081394, WO14074072, US9619567, US9591236, US9589535, US9554051, US9508009, US9501498, US9477980, US9460351, US9373025, US9177423, US2017148089, US2016269714, US2016196668, US2016093085, US2016086202, US2016071321, US2015286364, US2015154691, US2015134818, US2015134302,

US2015131869, US2015105889, US2015042758, US2015026016, US2015024840, US2015022550, US2014282137, US2014278992, US2014249961, US2014214587, US2014201023, US2014146178, US2014129373, US2014129329, US2014108202, US2013308017, US2013254646, US2013113830, TWI541734, LU92492, KR101499699, GB2541156, GB2535302, GB2517270, GB2503331, FR3033657, EP3121793, EP2775456, EP2775456, DE102015213832, DE102013203667, CN104637084, CN104574499, CN104571516, CN104504576, CN104252361, CN103761915, CN103761915, CN103533449, CN103533438, CN103324810,

Abstract:
Source: US2014176565A Methods for generating and sharing a virtual body model of a person, created with a small number of measurements and a single photograph, combined with one or more images of garments. The model represents a realistic representation of the users body and is used for visualizing photo−realistic fit visualizations of garments, hairstyles, etc. The virtual garments are created from layers based on photographs of real garment from multiple angles. The virtual body model is used in multiple embodiments of manual and automatic garment, make−up, and, hairstyle recommendations, such as, from channels, friends, and fashion entities, and sharable for visualization and comments on looks, for enabling users to buy garments that fit other users, suitable for gifts or similar, and can be used in peer−to−peer online sales where garments can be bought with the knowledge that the seller has a similar body shape and size as the user.

12) Family number: 54156869 (US2013165400A) © PatBase

Title: SUBSTITUTED NUCLEOSIDES, NUCLEOTIDES AND ANALOGS THEREOF

Priority: US20110579560P 20111222 US20110615479 20111222 US20120721988 20121220 US20120613836P 20120321 US20130386294 20130319 US20140386294 20140918 WO2012US71063 20121220 WO2013US33018 20130319 US20150790645 20150702 US20160221961 20160728

Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: ALIOS BIOPHARMA INC

Assignee(s):(std)**:** ALIOS BIOPHARMA INC

Assignee(s): ALIOS BIOPHARMA INC260 E. GRAND AVENUE2ND FLOORSOUTH SAN FRANCISCOCA94080US ; BEIGELMAN LEONID ; DEVAL JEROME ; WANG GUANGYI ; SMITH DAVID BERNARD ; PRHAVC MARIJA

Inventor(s):(std)**:** BEIGELMAN LEONID ; BERNARD SMITH DAVID ; GUANGYI WANG ; JEROME DEVAL ; LEONID BEIGELMAN ; MARIJA PRHAVC ; PRHAVC MARIJA ; DAVID SMITH ; DEVAL JEROME ; SMITH DAVID BERNARD ; WANG GUANGYI ; WANG GUANGYL

Inventor(s): WANG GUANGYIUS ; SMITH DAVID BERNARDUS ; DEVAL JEROMEUS ; PRHAVC MARIJAUS ; DAVID BERNARD SMITH ; BEIGELMAN LEONIDUS

Agent(s): GRIFFITH HACK; SHELSTON IP PTY LTD; SMART AND BIGGAR; NORTON ROSE FULBRIGHT CANADA LLP SENCRL SRL; JOHANSSON AND LANGLOIS LTDA; SARGENT; ALICIA LLOREDA RICAURTE; BOERLIN MARIA; ZACCO SWEDEN AB; UNIUS PATENT ATTORNEYS OFFICE; KOBAYASHI HIROSHI; OHMORI NORIO; DREW AND NAPIER LLC; KNOBBE MARTENS OLSON AND BEAR LLP; MILLER KIMBERLY J

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A61K A61K31/4184 A61K31/4192 A61K31/506 A61K31/522 A61K31/675 A61K31/706 A61K31/7068 A61K31/7072 A61K31/7076 A61K31/708 A61P31/12 A61P31/14 A61P31/16 C07D239/00 C07D471/04 C07D473/34 C07H C07H19/00 C07H19/06 C07H19/073 C07H19/10 C07H19/11 C07H19/12 C07H19/14 C07H19/16 C07H19/173 C07H19/20 C07H19/207 C12N9/99 (Advanced/Invention);
A61P31/14 (Advanced/Non–invention);
A61K31/7068 A61K31/7072 C07H19/00 (Core/Invention);
A61K A61P C07D C07H C12N (Subclass/Invention)

CPC: C07D473/34 C07H19/14 C12N9/127 C12Y207/07048 A61K45/06 C07D405/04 C07D405/14 C07D487/04 C07H19/16 C07H19/06 C07H19/00 C07D473/18 C07D493/04 A61K31/706 A61K31/7068 A61K31/7072 A61K31/7076 C07H19/10 C07H19/12 C07H19/207 A61K31/708 C07H19/20

US class: 1/1 514/43 514/45 514/46 514/47 514/48 514/49 514/50 514/51 536/26.14 536/26.26 536/26.3 536/26.8 536/27.81 536/28.3 536/28.5 536/28.53

Classification Explorer

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WO14070771, WO14048532, WO14038561, WO14026198, WO14022639, WO14008236, WO13151975, WO13142525, WO13142159, WO13142124, WO13138210, WO13096679 A1, WO13019874, WO12094248, WO12041965, WO12040124 A1, WO12012776 A1, WO12012465, WO11133871, WO11123518, WO11100131, WO11057204, WO11029537, WO11005860, WO10145778, WO10132513 A1, WO10108140, WO10091386, WO10089128, WO10088924, WO10084115, WO10075554, WO10048552, WO10036407, WO10030858 A1, WO10027005, WO10026153 A1, WO10020786, WO09152095 A2, WO09129120, WO09126293, WO09125841 A1, WO09105712, WO09086201, WO09067409 A1, WO09050707, WO09040269, WO09010299, WO09009951 A1, WO09003042, WO09001097, WO08121634 A2, WO08117047, WO08117046, WO08100447, WO08095050, WO08095040, WO08089439, WO08089105, WO08086042, WO08083465, WO08032103, WO08019124, WO08017515, WO08012555, WO07149554, WO07113538, WO07055170, WO07038860, WO07038859, WO07020193 A2, WO07006544, WO06116512, WO06105440, WO06097320, WO06094347, WO06084281, WO06063717, WO06063149 A1, WO06050501, WO06048884, WO06011130, WO06000922, WO05123755, WO05063246, WO05044836, WO05034940, WO05034878, WO05021568, WO05020884, WO04106356, WO04091499, WO04080466, WO04052899, WO04037159, WO04014312, WO04003000, WO04002999, WO04002422, WO03104250, WO03099840, WO03095467, WO03088908, WO03073989, WO03072757 A2, WO03070912, WO03070193, WO03062256, WO03062255 A2, WO03048315, WO03039523, WO03035012, WO03026675, WO03026589, WO03022859, WO0232920 A2, WO0231176, WO02100415 A2, WO02083152, WO02057425 A2, WO02055085, WO0203997, WO0168663, WO0143731, WO0127114, WO0119360, WO0069877 A1, WO0069876 A1, WO0066604 A2, WO0056748 A1, WO0034298, US8765710 BB, US8580762 BB, US8445669 BB, US7629328 BB, US7151089 BB, US7125855 BB, US7094768 BB, US6787525 BA, US6784166 BB, US6403568 BA, US6262241 BA, US6239265 BA, US6127121 A, US6083505 A, US6004939 A, US5977325 A, US5852188 A, US5808139 A, US5777100 A, US5700919 A, US5670633 A, US5658731 A, US5645985 A, US5641784 A, US5625056 A, US5602240 A, US5543507 A, US5508407 A, US5478813 A, US5466786 A, US5457191 A, US5447934 A, US5446139 A, US5446137 A, US5446031 A, US5432272 A, US5420115 A, US5412082 A, US5378825 A, US5378693 A, US5296348 A, US5268376 A, US5264618 A, US5171849 A, US5138045 A, US4880784 A, US4797495 A, US4762823 A, US4713383 A, US4652554 A, US4626526 A, US4305932 A, US4230698 A, US4211773 A, US3832341 A, US2016039858, US2016024136, US2016022724, US2016016987, US2015368286, US2015366888, US2015366887, US2015315228, US2015183819, US2015141363, US2015105341, US2015051167, US2015038451, US2015011497 AA, US2014303113 AA, US2014303108 AA, US2014179910 AA, US2014179627 AA, US2014088117 AA, US2013323836 AA, US2013315868 AA, US2013281687 AA, US2013253181 AA, US2013252920 AA, US2013165400 AA, US2013164261 AA, US2012165286 AA, US2012157511 AA, US2012071434 AA, US2012070415 AA, US2012070411 AA, US2012035115 AA, US2011171192 AA, US2011054164 AA, US2010331397 AA, US2010240604 AA, US2010234584 AA, US2010227834 AA, US2010151001 AA, US2010093992 AA, US2010029494 AA, US2009274686 AA, US2009176732 AA, US2009124796 AA, US2009076062 AA, US2008255038 AA, US2007270452 AA, US2007099865 AA, US2007078130 AA, US2007042988 AA, US2006205687 AA, US2006205685 AA, US2004259934 AA, US2004229840 AA, US2004229839 AA, US2004181052 AA, US2004167096 AA, US2004158055 AA, US2004014959 AA, US2004002596 AA, US2003124513 AA, US2003105051 AA, US2003096980 AA, US2003064945 AA, US2002035077 AA, SU1417408, PL144471, JP9328497 A2, JP7242544, JP63215694, JP60228497, JP5051395, JP4226999 A2, JP2008214305, JP2006248949, JP2006131596, JP2004313002, JP2003310293, JP2003055392, JP2003012690, JP2002322192 A2, JP2002302498, GB2234983, GB2188931, FR2688003, EP2264169, EP2177527 A1, EP1980568, EP0547008, EP0536936, EP0535231, EP0461815, EP0457326, EP0372268, EP0365849, EP0306845, EP0192315, DE4217679, DE2941592, DE102008035299, DE102004009704, CN1646141 A, CN104114568 A, CN103102345, CN101177442 A, CL313505, CL263901, CL164114, CA2600359, CA2042795, CA2003408,

Forward Citations: WO16069489, WO16057828, WO16028866, WO16022464, WO16014398, WO15134334, WO15106128, WO15095419, WO15056213, WO15054465, WO15034420, WO15017675, WO13142525, US9617295, US9605018, US9603864, US9603863, US9598457, US9540411, US9504705, US9481703, US9447137, US9441007, US9422323, US9422322, US9394330, US9365605, US9346848, US9278990, US9249174, US9243022, US9073960, US9012427, US8980865, US8916538, US8895723, US8877731, US8871737, US8846896, US2016176910, US2016052953, US2014303113, JP2017502925, CN104447923, CN104203253,

Abstract:
Source: US2013165400A Disclosed herein are nucleosides, nucleotides and analogs thereof, pharmaceutical compositions that include one or more of nucleosides, nucleotides and analogs thereof, and methods of synthesizing the same. Also disclosed herein are methods of ameliorating and/or treating a disease and/or a condition, including an infection from a paramyxovirus and/or an orthomyxovirus, with a nucleoside, a nucleotide

and an analog thereof.

13) Family number: 32396421 (US2002164049A) © PatBase

Title: EMULSION PRODUCTS AND IMAGERY EMPLOYING STEGANOGRAPHY

Priority:

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Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: DIGIMARC AN OREGON CORPORATION CORP

Assignee(s):(std)**:** CARR J S ; CARR J SCOTT ; BRUNDAGE TRENT J ; DIGIMARC CORP ; CONWELL WILLIAM Y ; DAVIS BRUCE L ; LEVY KENNETH L ; JONES KEVIN C ; GROSSI BRIAN J ; MCKINLEY TYLER J ; PERRY BURT W ; HEIN WILLIAM C III ; MACINTOSH BRIAN T ; KUMAR ARUNA B ; HANNIGAN BRETT T ; LIVERMORE MEGAN I ; EVANS DOUGLAS B ; RAMOS DANIEL O ; RODRIGUEZ TONY F ; SEDER PHILLIP A ; SEDER PHILLIP ANDREW ; WILLAM Y CONWELL ; RHOADS GEOFFREY B ; GRAHAM STANLEY E

Assignee(s): PINECONE IMAGING CORP ; DIGIMARC CORP WAS DMRC CORPORATION.. ; DMRC LLC9405 SW GEMINI DRIVEBEAVERTONOR97008US ; DMRC CORP9405 SW GEMINI DRIVEBEAVERTONOR97008US ; DIGIMARC CORP250–19801 SW 72ND AVENUETUALATINOR97062US ; DIGIMARC CORP WAS DMRC CORP ; DMRC CORP ; DMRC LLC ; DIGIMARC CORP SEDER PHILLIP ANDREW CARR J ; HEIN WILLIAM C ; DIGIMARC AN OREGON CORP CORP ; DIGIMARC A DELAWARE CORP CORP ; DIGIMARC (AN OREGON CORPORATION) CORP ; DIGIMARC AN OREGON CORPORATION CORP ; DIGIMARC (A DELAWARE CORPORATION) CORP ; DIGIMARC A DELAWARE CORPORATION CORP ; CARR JONATHAN SCOTT ; CARR J ; DIGIMARC CORP BRUNDAGE TRENT J HEIN WILLIAM C

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Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; OYEN WIGGS GREEN AND MUTALA LLP; BORDEN LADNER GERVAIS LLP; DIGIMARC CORP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

International class(IPC 8–9)**:** B29C45/14 B41J2/01 B41J29/393 B41J3/407 B41M3/10 B42D15/00 B42D15/10 B42D25/00 B42D25/29 B42D25/333 D21H21/40 G03G15/00 G06F1/00 G06F12/00 G06F13/00 G06F15/16 G06F17/00 G06F17/30 G06F21/00 G06F3/03 G06F3/12 G06K15/00 G06K19/06 G06K19/14 G06K19/18 G06K7/00 G06K7/14 G06K9/00 G06K9/20 G06K9/22 G06K9/36 G06K9/46 G06K9/54 G06Q10/00 G06Q10/10 G06Q20/34 G06Q20/40 G06Q30/00 G06Q30/02 G06Q30/06 G06Q40/00 G06Q40/02 G06Q50/00 G06T1/00 G06T7/00 G07C9/00 G07D7/00 G07D7/12 G07D7/20 G07F17/16 G07F17/26 G07F7/08 G07F7/10 G07F7/12 G09C1/00 G09C5/00 G09G5/08 G10L11/00 G10L19/00 G10L19/018 G11B20/00 G11B20/10 H04B1/66 H04K1/00 H04L12/16 H04L29/08 H04L9/00 H04L9/32 H04N1/00 H04N1/23 H04N1/32 H04N1/387 H04N1/40 H04N1/44 H04N5/91 H04N5/913 H04N7/08 H04N7/081 H04N7/16 H04N7/26 (Advanced/Invention); B29C45/14 B41M3/14 G06F12/00 G06F13/00 G06F17/00 G06F17/30 G06K17/00 G06K19/06 G06K7/00 G06K9/00 G06K9/18 G06K9/36 G06Q10/00 G06Q20/16 G06Q20/38 G06Q30/06 G06Q50/00 G06T1/00 G07C11/00 G09C5/00 G10L11/00 H04L9/32 H04N1/32 H04N1/387 H04N21/8358 H04N7/08 H04N7/081 H04N7/16

H04Q7/38 H04W76/02 H04W8/26 (Advanced/Non–invention);
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B29C45/14 G06K17/00 H04Q7/38 (Core/Non–invention)

International class (IPC 1–7): B42D15/00 G06F12/00 G06F13/00 G06F15/16 G06F17/00 G06F17/30 G06F17/60 G06K19/06 G06K7/00 G06K9/00 G06K9/36 G06K9/54 G06T1/00 G07D7/00 G07D7/12 G09C5/00 G09G5/08 G10L11/00 H04J3/12 H04K1/00 H04L9/00 H04L9/32 H04N1/00 H04N1/32 H04N1/387 H04N1/40 H04N7/00 H04N7/08 H04N7/081 H04N7/16 H04N7/167

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European class: B41J2/01 B41J29/393 B41J3/407 B41M3/10 B42D15/00C B42D15/00H6 B42D15/10 D21H21/40 G03G15/50H G06F1/00N7A G06F1/00N7R2 G06F17/30G4 G06F17/30M1 G06F17/30W1F G06F17/30W5 G06F17/30W5B G06F17/60B2 G06F21/10 G06F21/36 G06F21/60C2 G06F3/00B G06K19/06C3 G06K19/06C5 G06K19/14 G06K19/18 G06K7/14 G06K7/14A2C G06K7/14A4C G06K9/00L G06K9/46 G06Q10/10 G06Q10/107 G06Q20/20 G06Q20/341 G06Q20/40145 G06Q30/02 G06Q30/0213 G06Q30/0225 G06Q30/0603 G06Q30/0633 G06Q30/06C G06Q40/02 G06T1/00W G06T1/00W2 G06T1/00W6 G06T1/00W6C G06T1/00W6G G06T1/00W6M G06T1/00W8 G06T7/00B G06T7/00B1P G06T7/00B1R G07C9/00B6D2 G07D7/00B2 G07D7/00B4 G07D7/00D G07D7/20 G07F17/16 G07F17/26 G07F7/08 G07F7/08B G07F7/10D G07F7/10E G07F7/12 G10L19/018 G11B20/00P G11B20/00P1 G11B20/00P10 G11B20/00P12 G11B20/00P14 G11B20/00P14A G11B20/00P14D G11B20/00P18 G11B20/00P1C G11B20/00P3 G11B20/00P3C G11B20/00P5 G11B20/00P5A2 G11B20/00P5A7 G11B20/00P5G5 H04B1/66M H04L29/08N27L H04L29/08N27S H04L29/08N27X9 H04L29/08N31Q H04L29/08N31Y H04N1/00A H04N1/00A1 H04N1/00A3E H04N1/00A4B9 H04N1/00A5 H04N1/00C H04N1/00C3K H04N1/00G2H H04N1/00P H04N1/00P2R H04N1/00P2R2 H04N1/00P3A H04N1/00P3M2 H04N1/00P3M2H H04N1/00P3P H04N1/00W2 H04N1/00W4 H04N1/23B H04N1/23B2 H04N1/23B8 H04N1/32C16 H04N1/32C19 H04N1/32C19B H04N1/32C19B2 H04N1/32C19B2B H04N1/32C19B3 H04N1/32C19B3B H04N1/32C19B3C H04N1/32C19B3E H04N1/32C19B3G H04N1/32C19B3J H04N1/32C19B6 H04N1/32C19B6D H04N1/32C19B7 H04N1/32C19C H04N21/2389B H04N21/8358 H04N5/913 H04N7/167D H04N7/26 H04N7/26E10 H04N7/26J L29C45/14D L41M3/14 S03G215/00G2B S06F221/07C4 S06F221/07C4T S06F221/2101 S06F221/2107 S06F221/2119 S06K17/00W18 S06K19/06W8 S06T201/0051 S06T201/0052 S06T201/0053 S06T201/0061 S06T201/0065 S06T207/30144 S07C11/02 S11B20/00P S11B20/00P13

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US class: 1/1 1/1P 235/375 235/375S 283/72 345/158 345/163 345/163P 345/335 348/460 358/1.18 358/118 358/3.28 358/3.280P 358/3.280S 358/32.8 358/328 375/E07.026 375/E07.089 375/E7.026 375/E7.089 375/E70.26 375/E70.89 375/E70.89S 38/223.2 380/255 380/28 380/287 380/4 380/54 380/59 382/100 382/100P 382/100S 382/107 382/112 382/115 382/115S 382/181 382/232 382/306 382/306P 386/E05.004 386/E5.004 386/E50.04 386/E50.04S 455/556.1 455/566.1 704/E19.009 704/E19.009S 705/14 705/14.26 705/14.260P 705/26 705/26.8 705/27 707/2 707/999.002 707/999.002S 707/E17.02 707/E17.112 707/E17.112S 709/202 709/203 709/203P 709/217 709/217S 709/302 709/313 710/200 713/176 715/749 715/846 715/863 719/313 G9B/20.002

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Abstract:
Source: US2002164049A Images are steganographically marked with codes that can be used, e.g., by reference to a remote registry, to identify the image proprietors. Some embodiments pre−mark blank emulsion film or paper products with such codes, so that images formed thereon can be traced back to their proprietors. A variety of other embodiments and technologies are also disclosed.

0) US2012313272A – COMPONENT PROTECTIVE OVERMOLDING

14) Family number: 52545536 (US2012313272A) © PatBase

Title: COMPONENT PROTECTIVE OVERMOLDING

Priority:

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Family:

Publication number	Publication date	Application number	Application date
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Assignee(s): MACGYVER ACQUISITION LLC ; ALDSON THOMAS ALAN ; ALIPH INC ; SILVER LAKE WATERMAN FUND LP SUCCESSOR AGENT AS ; PROJECT PARIS ACQUISITION LLC ; WELLS FARGO BANK NATIONAL ASSOCIATION AGENT AS ; LEE DRYSDALE RICHARD ; LUNA MICHAEL EDWARD ; DBD CREDIT FUNDING LLC ADMINISTRATIVE AGENT AS ; ALIPHCOM99 RHODE ISLAND STREET3RD FLOORSAN FRANCISCOCA94103US ; BLACKROCK ADVISORS LLC ; BODYMEDIA INC

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JR ET AL; KOKKA SCOTT S ET AL; KORDICH DONALD C; CHUANG CHIEN JU ALICE ET AL; DENNY TRUEMAN H ET AL; BACKUS KENNETH R ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A41D1/00 A44C5/00 A45F5/00 A61B5/00 A61B5/01 A61B5/02 A61B5/0205 A61B5/024 A61B5/053 A61B5/103 A61B5/11 A61B5/145 A61B5/16 A61G12/00 A63B71/00 A63B71/06 B05D5/00 B29C41/20 B29C45/14 B29C45/16 B29C45/76 B29C45/84 B29C59/16 B29C70/70 C23C16/44 C23C16/52 C23C28/00 G01B21/16 G01C21/20 G01D11/00 G01D11/24 G01D21/02 G01D9/00 G01K7/00 G01P15/00 G04G21/02 G05B1/01 G05B15/00 G05B15/02 G05B19/045 G05G1/02 G06F1/00 G06F1/08 G06F1/16 G06F1/18 G06F1/26 G06F1/32 G06F13/38 G06F15/00 G06F15/16 G06F17/00 G06F17/40 G06F19/00 G06F19/24 G06F21/32 G06F3/00 G06F3/01 G06F3/033 G06F3/0346 G06F3/048 G06F3/0484 G06F7/00 G06F7/04 G06F9/06 G06F9/44 G06Q10/00 G06Q30/00 G06Q30/02 G06Q40/00 G06Q50/00 G06Q50/22 G08B1/08 G08B21/02 G08B21/04 G08B23/00 G08B5/22 G08C17/02 G09B19/00 G09B5/12 G11B7/085 G11C5/00 G6F15/16 G6F19/00 G6F3/01 G6F3/033 G6F7/04 G6Q10/00 G8B1/08 H01H13/14 H01L21/56 H01Q1/24 H01R12/51 H01R13/52 H02J13/00 H02J15/00 H03F1/26 H04B1/38 H04B1/3827 H04B5/00 H04B7/00 H04L12/12 H04L12/16 H04M1/02 H04Q9/04 H04W4/00 H04W48/16 H04W52/02 H04W56/00 H04W76/02 H04W8/00 H04W88/02 H04W88/06 H05K3/28 H05K5/00 H05K5/02 H4W88/02 (Advanced/Invention); A61B5/01 A61B5/08 A61B5/145 A61B5/16 B29C35/08 B29C45/14 B29C45/16 B29C45/84 G06F1/16 G06Q20/40 G07C9/00 H04L12/16 H04W4/00 (Advanced/Non–invention)

CPC: A61B5/02055 A61B5/024 A61B5/0531 A61B5/08 A61B5/1112 A61B5/1118 A61B5/14532 A61B5/14542 A61B5/165 A61B5/6829 A61B2560/0242 A61B2562/0219 B29C2035/0827 A61B2562/164 A61B5/02438 A61B5/145 A61B5/14552 A61B5/222 A61B5/4818 B29C45/14655 B29C2045/14844 G06F19/3487 A61B5/14551 G06F19/3443 G08B21/0492 A61B5/4806 A61B5/6813 A61B5/742 A61B5/744 G01D21/02 A41D1/002 G01B21/16 G08B21/0446 G08B21/0453 G06F3/0484 G06F1/324 A61B5/0059 A61B5/6831 G06F19/3475 G06F19/323 G06F19/3431 G06F1/3206 G06F3/015 G06F3/017 G06F3/0346 G06F3/014 A61B5/0533 A61B5/0816 A61B5/112 A61B5/18 A61B5/4809 A61B2503/10 A61B2503/12 A61B2503/22 A61B5/7465 G01C22/006 A61B5/0205 A61B5/14546 A61B5/4815 A61B5/113 G06F3/002 G06F3/016 G06Q50/24 A61B5/6804 G08B21/02 H04M1/72569 G06F19/32 G06F15/00 A61B5/0024 G06F19/3418 G05B2219/2614 A61B5/6802 A61B5/6801 A61B5/01 A61B5/681 A61B5/0002 A61B5/411 A61B5/7455 B29C41/20 A61B5/4266 A61B2560/0204 A61B5/1123 G06Q30/02 G05B1/01 G08B5/22 A61B5/11 G08C17/02 A45F5/00 B29C45/14836 C23C28/00 A45F2005/008 A45F2200/0516 Y02B60/1217 G06F3/011 G06F1/1694 G06F2203/0381 G06F2203/0384 G06F1/3296 G06F1/08 A61B5/0004 A61B2560/0209 G06Q50/22 G06F9/4401 G06F3/01 H04W52/0241 Y02B60/50 H04W4/001 H04W56/001 H04Q9/04 H04W4/008 G06F21/64 G06F21/316 G06F21/32 G06F21/6245 H04B1/385 G01D9/00 G01D11/00 A61B5/002 A61B5/7264 A61B2505/09 H04M1/02 B29L2031/34 A61B5/746 G06Q50/00 G06F19/3406 B29C45/14819 G06F19/3481 H01Q1/24 H01Q1/40 H01Q9/40 B29C45/1676 B29C2045/14893 B29C2045/1682 B29K2021/003 H05K5/0217 A61B5/0006 A61B5/0008 A61B5/6814 A61B5/6822 A61B5/6823 A61B5/6824 A61B5/6828 G01K13/002 G04G17/02 G06F1/1656 H01L21/56 B29C45/14639 A61B5/0022 H04W76/023 H04W84/12 H04W88/06 H01L23/3135 H04W8/005 G06F1/1698 G06F3/0202 G06F3/0238 H04B11/00 H04M1/7253 H04M1/72558 H04M2250/02 H04M2250/12 H04R1/08 B29K2023/12 B29K2995/0069 B29K2995/0093 B29L2031/3481 B29C45/1671 G06F1/163 G09G3/2096 G02B5/0278 G09G2300/023 G09G2300/0465 G09G2320/02 G04G21/02

European class: H04W52/02T4G

US class: 1/1 224/165 264/135 264/255 264/261 264/263 264/265 264/272.14 264/272.17 264/279 264/279.1 264/36.1 264/40.1 264/447 340/5.1 340/5.51 340/539.11 340/539.12 340/573.1 340/575 340/870.02 340/870.07 340/870.16 361/679.01 361/679.03 368/10 370/311 370/329 427/160 427/402 427/58 427/8 434/127 455/41.1 455/41.2 455/41.3 482/9 600/300 600/301 600/372 600/547 600/549 600/595 700/275 700/276 700/94 702/130 702/141 702/150 702/189 702/19 702/57 705/14.1 705/2 705/3 705/42 709/202 713/100 713/320 713/323 713/324 715/764 715/864

Classification Explorer

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Abstract:
Source: US2012313272A Techniques for component protective overmolding include selectively applying a protective material substantially over one or more elements coupled to a framework, forming an inner molding substantially over the framework, the one or more electrical elements coupled to the framework, and the protective material. In some examples, the inner molding is formed after the protective material has been selectively applied, forming an outer molding substantially over the inner molding and the outer molding is configured to protect the framework and to provide a surface configured to receive a pattern. Further, the outer molding may be configured to be removable if a defect is found during an inspection performed after the outer molding is formed.

- **search:** SS3 FT=can and end and (print* or decorat*) and (beverage* or food*) and (orient* or guid*) and tab (Results 120)
- List: SS3 1–50 (FT=can and end and (print* or decorat*) and (beverage* or food*) and (orient* or guid*) and tab) (Results 120)

0) US2002110625A – CONTINUOUS PACKAGING IN ENCLOSED CONDUITS

1) Family number: 29750624 (US2002110625A) © PatBase

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

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Abstract:
Source: US2002110625A The invention relates to a package having a first web defining a cavity and a second web bonded to the first web, wherein the second web includes microperforations at a location that is specific to minimize the escape of liquids from the cavity to the exterior of the package. In one particular embodiment, the first web defines a four sided cavity with walls and corresponding flaps attached to the walls that can be folded and bonded to the cavity walls. The second web is an overwrapping lidding web, wherein microperforations are provided on the web material so that the microperforations are aligned with a flap recess, which in turn is in communication with the interior of the tray cavity. In this manner, suitable gas exchange can occur with minimal to no escape of liquids from the tray cavity.

0) US2014084165A – SELECTABLE LENS BUTTON FOR A HAZARD DETECTOR AN...

2) Family number: 56033950 (US2014084165A) © PatBase

Title: SELECTABLE LENS BUTTON FOR A HAZARD DETECTOR AND METHOD THEREFOR

Priority:

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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A47G29/14 B23P19/00 F16M13/02 F24F11/00 G01D11/24 G01J5/02 G01J5/04 G01J5/08 G01L19/14 G01N21/84 G01V8/10 G05B15/02 G05B19/042 G05F1/46 G06F1/32

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US class: 1/1 200/341 248/207 250/338.1 250/340 29/428 29/525.01 29/525.08 29/592.1 29/825 29/832 307/112 307/117 307/151 307/26 307/38 340/328 340/5.51 340/5.65 340/5.7 340/5.81 340/5.85 340/501 340/506 340/511 340/514 340/517 340/521 340/527 340/539.22 340/540 340/603 340/628 340/629 340/630 340/632 340/636.18 340/691.1 340/692 340/693.11 340/693.3 340/693.9 700/276 700/90 705/330 705/333 706/46 709/202

Classification Explorer

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Abstract:
Source: US2014084165A According to one embodiment, a hazard detector includes a front casing coupled with a back plate to define a housing having an interior region. The hazard detector also includes a passive infrared sensor device that is disposed within the interior region and that is positioned to face a room within which the hazard detector is positioned so as to detect objects within the room. The hazard detector additionally includes a Fresnel lensing component that is disposed on an exterior of the front casing and that is positioned in front of the passive infrared sensor device to direct infrared radiation onto the passive infrared sensor device. The Fresnel lensing component is configured to be inwardly pushable by a user to cause contact with a switch positioned therebehind so that input is provided to the hazard detector by the user.

0) US2013073336A – SYSTEM AND METHOD FOR USING GLOBAL LOCATION INF...

3) Family number: 53204710 (US2013073336A) © PatBase

Title: SYSTEM AND METHOD FOR USING GLOBAL LOCATION INFORMATION, 2D AND 3D MAPPING, SOCIAL MEDIA, AND USER BEHAVIOR AND INFORMATION FOR A CONSUMER FEEDBACK SOCIAL MEDIA ANALYTICS PLATFORM FOR PROVIDING ANALYTIC MEASFUREMENTS DATA OF ONLINE CONSUMER FEEDBACK FOR GLOBAL BRAND PRODUCTS OR SERVICES OF PAST, PRESENT, OR FUTURE CUSTOMERS, USERS OR TARGET MARKETS

Priority:

US20110233352	20110915	US20110233552	20110915	US20110337271	20111226
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US20120594842	20120826	US20120543871	20120708	US20120551556	20120717
US20120439735	20120404	US20120712919	20121212	WO2012US36896	20120508

Family:

Publication number	Publication date	Application number	Application date
US2013073336 AA	20130321	US20120594842	20120826
US2013073366 AA	20130321	US20120359498	20120127
US2013073374 AA	20130321	US20110233352	20110915
US2013073376 AA	20130321	US20110337271	20111226
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US2013073400 AA	20130321	US20120430600	20120326
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WO13039573 A2	20130321	WO2012US36896	20120508
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Probable Assignee: GOOGLE INC

Assignee(s):(std)**:** BULLOCK NATHAN ; GOOGLE INC ; HEATH STEPHAN

Inventor(s):(std)**:** BULLOCK NATHAN ; HEATH STEPHAN

Agent(s): MCDONNELL BOEHNEN HULBERT AND BERGHOFF LLP; PETER B; HAMILTON DESANCTIS AND CHA LLP

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9)**:** G06F15/16 G06F15/173 G06F17/00 G06F3/01 G06Q10/10 G06Q20/00 G06Q30/02 G06Q50/00 G06Q99/00 H04L12/26 H04L29/06 (Advanced/Invention)

CPC: H04L63/00 G06Q30/0201 G06Q30/0241 G06Q30/06 G06Q30/08 G06Q30/0224 G06Q30/0239 G06Q30/0253 G06Q30/0267 G06Q30/0271 G06Q30/0222 G06Q30/0261 G06Q10/10 H04L12/2647 H04L43/0811 G06F17/30241 G06F17/3087 G06Q50/01 G06Q30/0259 G06Q30/02 G06Q30/0207

US class: 705/14 705/14.23 705/14.25 705/14.39 705/14.53 705/14.54 705/14.73 705/26 705/319 705/39 705/7.29 709/204 709/220 709/224 709/227 709/228 715/738 726/26

Classification Explorer

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Abstract:
Source: US2013073336A A method, apparatus, non−transitory computer readable storage medium, computer system, network, or system, is provided for using location information, 2D and 3D mapping, social media, and

user behavior and information to provide alternative a consumer feedback social media analytics platforms for providing analytic measurements data of online consumer feedback for global brand products or services of past, present or future customers, users, and/or target markets, for companies, organizations, government agencies, and the like, by electronically collecting and analyzing, on a networked computer system using a processor, qualitative or quantitative online social media online communications, activity, and online communications and activity relevant to consumer products or services, or promotions thereof, of interest, in order to provide targeted, location based, 2D or 3D mapped, or impressions to generate online location information data or promotions to provide improved or desired customer perception or sentiment regarding a company's products, services or promotions thereof

0) US2008164224A – SYSTEM FOR CONNECTING MECHNICALLY DISSIMILAR CO...

4) Family number: 41998906 (US2008164224A) © PatBase

Title: SYSTEM FOR CONNECTING MECHNICALLY DISSIMILAR CONSUMER ELECTRONIC DEVICES TO AN

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Family:

Publication number	Publication date	Application number	Application date
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Assignee(s):(std)**:** KENDALL JAMES W ; KNIGHT JOHN M ; MCCOY RICHARD A ; MOES CHRISTOPHER S ; VISWANATHAN AMERESH ; WEINKAUF DAVID A ; WHIRLPOOL CO

Assignee(s): WHIRPOOL CORP ; WHIRLPOOL CORP

Inventor(s):(std)**:** HORST GALE R ; KENDALL JAMES W ; KNIGHT JOHN M ; KREFMAN STEPHEN D ; LECLEAR DOUGLAS D ; MCCOY RICHARD A ; MOES CHRISTOPHER S ; VISWANATHAN AMERESH ; WEINKAUF DAVID A

Agent(s): WHIRLPOOL PATENTS CO MD 0750; ROBERT A; MCGARRY BAIR PC; MCGARRY BAIR; KREFMAN STEPHEN

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A47F7/00 B41J11/02 F25D15/00 F25D23/00 F25D23/12 G06F1/16 G06F13/00 G06F13/12 G06F3/00 G08B23/00 H01R13/60 H01R13/66 H01R13/73 H01R24/00 H01R27/02 H01R31/06 H01R39/00 H04N5/64 H05K5/00 H05K5/02 H05K7/00 H05K7/02 (Advanced/Invention); A47F7/00 F25D23/00 F25D23/12 G06F13/12 G08B23/00 H01R13/00 H01R13/66 H01R13/73 H01R24/00 H01R27/00 H01R31/06 H01R39/00 H04N5/64 H05K5/00 H05K5/02 H05K7/00 H05K7/02 (Core/Invention)

CPC: G06F1/1613 G06F1/1632 G06F2200/1635 F25D23/126 F25D2400/361 F25D2400/40 H05K5/0017 F25D23/02 H01R27/02 F25D23/028 F25D23/12 F25D2400/06 H01R31/06

European class: F25D23/02E F25D23/12 G06F1/16P G06F1/16P6 H01R27/02 H01R31/06 H05K5/00C H05K5/02 R25D23/02 R25D23/02E R25D23/12 R25D23/12B R25D400/06 R25D400/361 R25D400/40 S06F200/1635

US class: 211/26 211/26.1 211/26.100P 211/26S 248/309.1 248/309.100S 248/442.2 320/104 320/112 320/128 340/500 340/500P 348/836 348/836P 361/679 361/679.01 361/679.21 361/679.25 361/679.43 361/681 361/724 361/724P 361/728 361/728P 361/729 361/729P 361/729S 361/735 361/735P 439/11 439/11P 439/527 439/620.21 439/620.210P 439/628 439/638 439/638S 439/660 439/676 62/259.2 62/331 710/10 710/2 710/303 710/34 710/62 710/64 710/64P 710/67 710/8 710/9

Classification Explorer

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Abstract:
Source: US2008164224A An adaptive adapter for coupling mechanically dissimilar devices to a host and systems including a host and an adaptive adapter. The systems may be mechanically dissimilar or may differ in their use or non−use of electrical service. In one embodiment, an adaptive adapter alternatively couples mechanically dissimilar consumer devices to a host and provides dissimilar services depending the type of consumer device chosen. In another embodiment a modular system is provided including a host providing at least one mechanical service to the adaptive adapter. In another embodiment, a modular system is provided including a host, an electronic device and an alternative non−electronic device.

0) US2010218684A – HEATING DEVICE WITH AN INTEGRATED THERMOBLOCK F...

5) Family number: 43128052 (US2010218684A) © PatBase

Title: HEATING DEVICE WITH AN INTEGRATED THERMOBLOCK FOR A BEVERAGE PREPARATION MACHINE

Priority:

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Family:

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A47J31/36 A47J31/40 A47J31/54 A47J31/56 F24H1/14 F24H9/20 (Advanced/Non–invention);
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A47J F04B F16L F24H G09F H01R (Subclass/Invention)

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European class: A47J31/36A4 A47J31/36A4B A47J31/36A4D A47J31/36B4 A47J31/36B4D A47J31/44A A47J31/44A1 A47J31/44A2E2 A47J31/44A3 A47J31/46 A47J31/52 A47J31/54A A47J31/54A1 F04B17/04D F04B53/00D4 F16L27/10J F16L37/14B1 F24H1/10B F24H1/14B F24H9/20A2D H01R13/11B H01R23/70K3 H05K1/18 H05K3/30D K47J201/00 K47J31/36 T05K201/10A19 T05K201/10A21 T05K201/10A23 T05K201/10A24 T05K201/10B26 T05K201/10C1H T05K201/20D

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Abstract:
Source: US2010218684A An in−line heating device for a liquid food or beverage preparation machine in which liquid is circulated through the heating device and then guided into a brewing chamber. This heating device includes a thermoblock with a metal mass that incorporates an inlet, an outlet and a heating chamber extending therebetween to form a passage for guiding the liquid circulating through the mass, with the mass arranged to accumulate heat and to supply heat to the liquid; and one or more electric components that are rigidly secured onto or into the thermoblock and that are connected to a printed circuit board or a flex−print arranged to control the thermoblock. The electric components are rigidly connected to the printed circuit board or flex−print, in particular via rigid connector pins or blades or rigid plug and socket members.

0) US2006110747A – PROCESS FOR IMPROVED PROTEIN EXPRESSION BY STRA...

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RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

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International class (IPC 1–7): C12P21/06

CPC: C12N15/63 C12N15/70 C12N15/74 C12N15/78 C12P21/02

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US class: 1/1 435/287.2 435/471 435/471S 435/6 435/6.14 435/6.140P 435/6.15 435/69.1 435/6P 435/7.1 435/7.100S

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Abstract:
Source: US2006110747A This invention is a process for improving the production levels of recombinant proteins or peptides or improving the level of active recombinant proteins or peptides expressed in host cells. The invention is a process of comparing two genetic profiles of a cell that expresses a recombinant protein and modifying the cell to change the expression of a gene product that is upregulated in response to the recombinant protein expression. The process can improve protein production or can improve protein quality, for example, by increasing solubility of a recombinant protein.

7) Family number: 49964070 (US2012128835A) © PatBase

Title: RECLOSABLE FLEXIBLE PACKAGING AND METHODS FOR MANUFACTURING SAME

Priority:

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Family:

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Designated states:

AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9)**:** B31B1/00 B31B1/20 B31B1/25 B31B1/26 B31B1/28 B31B1/86 B31B1/88 B31B1/90 B31B23/14 B31B23/26 B31B23/60 B31B25/00 B31B70/14 B31B70/26 B31B70/60 B32B3/30 B65B11/00 B65B23/10 B65B41/16 B65B5/00 B65B51/30 B65B61/02 B65B61/10 B65B61/18 B65B9/06 B65B9/067 B65B9/073 B65B9/20 B65D17/34 B65D30/10 B65D33/00 B65D33/20 B65D65/26 B65D65/28 B65D75/58 B65D75/60 B65D75/62 B65D75/64 B65D90/00 (Advanced/Invention)

CPC: B65D33/00 B31B25/00 B65B5/00 B65D33/20 B65D33/004 B31B1/20 B31B1/25 B31B1/26 B31B1/88 B31B1/90 B32B3/30 B65B9/08 B65B51/062 B65B9/20 B65B9/067 B65B23/10 B65B61/02 B65B61/184 B65D75/5838 B65D75/5855 B65B9/073 B65B41/16 B65B51/303 B65B51/306 B65B61/10 B65B61/182 B65D2575/586 Y10T428/15

European class: B65B23/10 B65B61/02 B65B61/18C B65B9/067 B65D75/58E1A

US class: 206/459.5 206/459.500S 220/359.2 220/359.200S 383/203 383/211 426/122 426/122P 428/43 428/43S 493/187 493/213 493/223 493/243 493/52 493/52S 53/461 53/461S 53/473

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Abstract:
Source: US2012128835A Flexible film packages having a partial, initial seal against ambient atmosphere and are easily openable and reclosable. The flexible film packages are generally resealable to extend the shelf−life or freshness of products contained therein once the package is initially opened. By one approach, the flexible film has two opposing edge portions that meet to form a longitudinal seal extending from a first end seal to a second end seal. The flexible film may have a score that defines a package opening. An elongated closure layer may extend over the score and may extend from a first end seal to a second end seal and within the opposing edge portions that form the longitudinal seal. The elongated closure layer may have a tack−free gripping portion used to release at least a portion of the elongated closure from the flexible film to form the package opening.

8) Family number: 31450352 (US2007177962A) © PatBase

Title: METHOD AND DEVICE FOR THE PRODUCTION OF A CAN BODY, AND CAN BODY

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Family:

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Inventor(s): WERNER BOLTSHAUER ; WERNER BOLTSHAUSER

Agent(s): BUECHEL VON REVY AND PARTNER; ROEB MARIA; HARNESS DICKEY AND PIERCE PLC; HARNESS DICKEY AND PIERCE

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B21C37/08 B21C37/09 B21D39/03 B21D51/26 B21D51/30 B21D51/46 B23D21/04 B23K1/20 B23K26/00 B23K26/20 B23K26/28 B23K31/02 B23K33/00 B26D3/16 B65B7/28 B65D8/04 B65D8/16 B65D8/18 B65D8/22 B65D83/14 B65D83/38 (Advanced/Invention); B23K101/12 B65D83/42 (Advanced/Non–invention);
B21C37/08 B21D39/03 B21D51/00 B21D51/26 B21D51/30 B21D51/38 B23D21/00 B23K1/20 B23K26/00 B23K31/02 B23K33/00 B26D3/16 B65D8/04 B65D83/14 (Core/Invention)

International class (IPC 1–7): B21C37/08 B21D51/26 B23K26/28 B23K33/00 B65D83/14

CPC: B23K26/206 B65D7/04 B65D7/38 B65D7/46 Y10T29/49828 Y10T29/49904 Y10T29/49986 Y10T29/53322 B21C37/09 B21D51/2646 B21D51/2669 B23K26/32 B23K2203/50 B23K33/006 B21D51/2676 B23K26/28 B23K2201/12 B21D51/2653 B65B7/28 B23D21/04 B65D83/38 B21D51/26 B23K26/282 B23K2201/125 B23K2203/04 B23K2203/10 B65D83/42 Y10T428/12493 B23K2201/34 B23K2203/08

European class: B21C37/09 B21D51/26 B21D51/26C B21D51/26E B21D51/26L B23D21/04 B23K26/20D B23K26/28 B23K26/28B B23K26/32D B23K26/32L2 B23K33/00B2 B65D7/04 B65D7/38 B65D7/46 B65D83/38 L23K201/12 L23K201/12B L23K201/34 L23K203/04 L23K203/10 L65D83/42

US class: 1/1 219/121.64 219/121.640P 220/23.91 220/23.910S 220/612 220/669 220/669S 220/678 228/13 228/13S 228/160 228/160P 29/429 29/429S 29/469 29/469S 29/527.4 29/527.400S 29/773 413/1 413/12 413/12S 413/19 413/19S 413/1P 413/2 413/26 413/2P 413/2S 413/3 413/4 413/69 413/69S 413/74 413/8 413/8P 428/615 428/615S 72/379.4 72/58

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Abstract:
Source: US2007177962A A can body with a jacket−like closed wall and a base constructed on one end of the can wall includes an external base covering in the form of a sheet material. The base covering is fixed into position on an annular connection region of the can body. The base covering can form a basically flat imprintable region in a main region that is surrounded by the connection region. If a bar code can be applied in this imprintable region, then a restriction of the configuration possibility of the can wall disappears. The base covering can form a stand region whereby a standing can body is only in contact with the support surface if necessary via the base covering, and consequently the occurrence of corrosion problems is prevented. A retaining device that leaves the base of a held can body free and a position fixing apparatus are used for fixing the base covering into position. A decorative foil on the exterior of the can wall can be overlapped by the base covering, which serves to prevent a detachment of the decorative foil on the base.

0) US2011259953A – POINT OF SALE INDUCTIVE SYSTEMS AND METHODS

9) Family number: 49742918 (US2011259953A) © PatBase

Title: POINT OF SALE INDUCTIVE SYSTEMS AND METHODS

Priority: CN201180028631 20110408 JP20130503972T 20110408 US20100322056P 20100408 US20110082503 20110408 US20100427984P 20101229 JP20160075248 20160404 US20110082513 20110408 WO2011US31661 20110408 US20150682364 20150409

Family:

Publication number	Publication date	Application number	Application date
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TWI578237 B	20170411	TW20160103241	20110408
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US2011259960 AA	20111027	US20110082503	20110408
US2015242660 AA	20150827	US20150682364	20150409
US8893977 BB	20141125	US20110082503	20110408
US9027840 BB	20150512	US20110082513	20110408
US9424446 BB	20160823	US20150682364	20150409
WO11127334 A2	20111013	WO2011US31661	20110408
WO11127334 A3	20111229	WO2011US31661	20110408

Probable Assignee: ACCESS BUSINESS GROUP INT LLC

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Assignee(s): ACCESS BUSINESS GROUP INTERNATIONAL LLC

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Inventor(s): DAVID W BAARMAN

Agent(s): AOKI ATSUSHI; TSURUTA JUNICHI; WARNER NORCROSS AND JUDD LLP; CIARAVINO VITO A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A47F1/12 A47F10/02 B65G1/07 D06F75/08 D06F79/02 D06F93/00 G01F23/20 G01F23/24 G01F23/26 G01G19/414 G01G3/00 G01G3/14 G01G7/00 G01K1/02 G06F17/00 G06F3/147 G06K17/00 G06K19/00 G06K19/06 G06K19/067 G06K19/07 G06K19/073 G06K7/01 G06K7/08 G06K7/10 G06Q90/00 H01F21/02 H01F38/14 H02J5/00 H02J7/02 H05K13/04 (Advanced/Invention); A47F10/02 G06F3/147 H01F21/02 H01F38/14 (Advanced/Non–invention)

CPC: A47F10/02 D06F93/005 G01F23/20 G01F23/24 G01F23/244 G01F23/26 G01G7/00 G01G19/4144 G06K19/0717 H01F21/02 H01F38/14 G06K19/0723 G06K7/086 G06K19/0672 G06F3/147 G09G2370/16 G09G2380/04 Y10T29/49002 B05B11/3056

European class: D06F93/00M G01F23/20 G01F23/24 G01F23/24A4B G01F23/26 G01G19/414C G01G7/00 G06K19/067Q G06K19/07E2 G06K7/08C2Q K47F10/02 T01F21/02 T01F38/14

US class: 1/1 235/375 235/375P 235/375S 235/383 235/385 235/385P 235/439 235/439S 235/440 235/440S 235/487 235/492 235/492S 29/592.1 29/592.100S

Classification Explorer

Cited documents: WO9915990, WO9828126, WO9802816, WO9734518, WO19802816, WO10080738, WO09143334 A2, WO09004542 A2, WO06001557, WO05072013, WO05018282, WO03044521 A1, WO0119141, USRE42513 E, USRE37956 E, US8468871 BB, US8389910 BB, US8350196 BB, US8342400 BA, US8286497 BB, US8258441 BB, US8251581 BB, US8192080 BB, US8154409 BB, US8077041 BB, US7999414 BB, US7989986 BB, US7954712 BB, US7940181 BB, US7937289 BB, US7923938 BB, US79156010, US7865071 BB, US7830259 BB, US7818088 BB, US7817043 BB, US7816632 BB, US7794142 BB, US7775083 BB, US7699226 BB, US7667602 BB, US7648065 BB, US7573005 BB, US7513425 BB, US7492164 BB, US7478749 BB, US7443057 BB, US7441463 BB, US7392948 BB, US7355150 BB, US7336175 BB, US7242301 BB, US7233241 BB, US7228078 BB, US7212414 BB, US7212127 BB, US7208707 BB, US7208707, US7154255 BB, US7123129 BA, US7088245 BB, US7072855 BA, US7065501 BA, US7042902 BB, US7036729 BB, US6972543 BA, US6966403 BA, US6959862 BB, US6957111 BB, US6953919 BB, US6924781 BA, US6917182 BB, US6912364 BB, US6859745 BB, US6844821 BB, US6825620 BB, US6823321 BB, US6822204 BB, US6810313 BB, US6774346 BB, US6753830 BB, US6752277 BA, US6741178 BA, US6738689 BB, US6727817 BB, US6727482 BB, US6714120 BB, US6664520 BB, US6657170 BB, US6621410 BA, US6609656 BA, US6600419 BB, US6571299 BA, US6555766 BB, US6554188 BA, US6552663 BB, US6531957 BA, US6509555 BA, US6507279 BB, US6505780 BA, US6504135 BB, US6501054 BB, US6479964 BB, US6476716 BA, US6444961 BB, US6427065 BA, US6426707 BA, US6424254 BA, US6409132 BB, US6407665 BB, US6404779 BA, US6364735 BA, US6361396 BA, US6360208 BA, US6348640 BA, US6341522 BA, US6320169 BA, US6316753 BB, US6313748 BA, US6307468 BA, US6304169 BA, US6274856 BA, US6271807 BA, US6266052 BA, US6262664 BA, US6249263 BA, US6232585 BA, US6209831 BA, US6204763 BA, US6189036 BA, US6184651 BA, US6181299 BA, US6181299 B1, US6173119 BA, US6173119 B1, US6169483 BA, US6169483 B1, US6140899 A, US6138389 A, US6133833 A, US6122849 A, US6109117 A, US6089453 A, US6087837 A, US6080975 A, US6040986 A, US6027027 A, US6025725 A, US6016550 A, US5991676 A, US5991170 A, US5954984 A, US5908574 A, US5842976 A, US5838235 A, US5831531 A, US5802749 A, US5736967 A, US57229609, US5661470 A, US5648008 A, US5640002 A, US5604486 A, US5604485 A, US5537126 A, US5450305 A, US5446447 A, US5381137 A, US5305199 A, US5291180 A, US5271643 A, US5221088 A, US5120934 A, US5119070 A, US5117092 A, US5039838 A, US4996405 A, US4845486 A, US4827104 A, US4774395 A, US4752680 A, US4727402 A, US4694283 A, US4563739 A, US4499355 A, US4430553 A, US4428232 A, US4351996 A, US4268737 A, US4183001 A, US4160971 A, US39017809, US3761668 A, US3760149 A, US3745676 A, US3742178 A, US3684853 A, US2013015177 AA, US2012250726 AA, US2012230365 AA, US2012205837 AA, US2011090937 AA, US2011038395 AA, US2010315389 AA, US2010156650 AA, US2010079416 AA, US2010065632 AA, US2010064901 AA, US2010052908 AA, US2010006646 AA, US2009313142 AA, US2009309736 AA, US2009295749 AA, US2009284179 AA, US2009278493 AA, US2009254419 AA, US2009224040 AA, US2009168088 AA, US2008283599 AA, US2008266092 AA, US2008217999 AA, US2008157603 AA, US2008143480, US2008052037 AA, US2008000894 AA, US2007279286 AA, US2007236174 AA, US2007228833 AA, US2007138923 AA, US2007023511 AA, US2007023510 AA, US2006210115 AA, US2006205381 AA, US2006192003 AA, US2006145864 AA, US2006132045 AA, US2005275533 AA, US2005247696 AA, US2005190072 AA, US2005167959 AA, US2005151511 AA, US2005131578 AA, US2005067410 AA, US2005049914 AA, US2005031051 AA, US2005007067 AA, US2004149736 AA, US2004134903 AA, US2004130916 AA, US2004130915 AA, US2004125403 AA, US2004098350 AA, US2004093274 AA, US2004071321 AA, US2004046020 AA, US2004032330 AA, US2004004073 AA, US2003220803 AA, US2003189094 AA, US2003177053 AA, US2003174099 AA, US2003171984 AA, US2003135417 AA, US2003125836 AA, US2003120607 AA, US2003117330 AA, US2003057167 AA, US2002191534 AA, US2002186133 AA, US2002178063 AA, US2002157411 AA, US2002152178 AA, US2002143320 AA, US2002116301 AA, US2002116268 AA, US2002089410 AA, US2002049650 AA, US2002048287 AA, US2002035524 AA, US2002022991 AA, US2002017993 AA, US2001004235 AA, US2001001856 AA, TWM359169, TW541846, TW407106, TW200717349, TW200632353, JP9319841 A2, JP7139991 A2, JP6020766, JP59072032, JP57198837, JP4066826, JP406020766, JP2010527226 T2, JP2009528692,

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Abstract:
Source: US2011259953A Systems and methods for the identification, powering and control of products and product packaging. The systems can include a point of sale display having a contactless power supply. The contactless power supply can provide a source of wireless power for products and product packaging. The products and product packaging can include light emitting diodes, e−ink displays and printed speaker circuits that activate as the operating frequency of the contactless power supply varies. Other embodiments include product level sensors, inductive reader networks, printed temperature sensors, product alignment systems, passive identification circuits and methods for controlling operation of the same.

0) US2008148948A – DISPENSING OF A SUBSTANCE

10) Family number: 32202483 (US2008148948A) © PatBase

Title: DISPENSING OF A SUBSTANCE

Priority:

EP20040075524	20040218	EP20040076206	20040421	EP20040755424	20040218
EP20080075219	20050211	EP20050707418	20050211	EP20090176849	20050211
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US20140307977	20140618				

Family:

Publication number	Publication date	Application number	Application date
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US9676538 BB	20170613	US20140307977	20140618	
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WO05077811 A3	20060330	WO2005EP01541	20050211	
ZA200607011 A	20080430	ZA20060007011	20060822	

Probable Assignee: MDS GLOBAL HOLDING PLC

Assignee(s):(std)**:** EVERS LUCAS ALPHONSUS MARIA ; MDS GLOBAL HOLDING LTD ; MDS GLOBAL HOLDINGS LTD ; MDS GLOBAL KHOLDING LTD ; STERNGOLD EDOUARD

Assignee(s): MDS GLOBAL HOLDING PLC

Inventor(s):(std)**:** EDOUARD EVERS LUCAS ALPHONSUS ; EDOUARD STERNGOLD ; EHVERS LUKAS AL FONSUS MARIJA ; EVERS LUCAS ; EVERS LUCAS ALPHONSUS ; EVERS LUCAS ALPHONSUS MARIA ; LUCAS EVERS ; MARIA EVERS LUCAS ALPHONSUS ; STERNGOLD EDOUARD ; STERNGOLD EHDUARD

Inventor(s): STERNGOLD EDOUARD SLM 3150 ; EVERS LUCAS ALPHONSUS MARIA 3707 CL ; EVERS LUCAS ALPHONSUS MARIA STERNGOLD EDOUARD ; LUCAS ALPHONSUS MARIA EVERS ; EHVERS LUKAS AL'FONSUS MARIJA

Agent(s): WALLINGTON DUMMER; GOWLING LAFLEUR HENDERSON LLP; GOWLING WLG CANADA LLP; TER MEER STEINMEISTER AND PARTNER PATENTANWAELTE MBB; RAU SCHNECK AND HUEBNER PATENTANWAELTE RECHTSANWAELTE PARTGMBB; HOUBEN CHRISTIAAN HEIN WILLEM FRANS ET AL; HOUBEN CHRISTIAAN HEIN WILLEM FRANS; MANRESA MANUEL; HOFFMANN AND BARON LLP; HOLLAND HART LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A47J31/00 A47J31/40 A47J31/44 A47J31/56 B32B38/00 B65B11/50 B65B11/52 B65B3/02 B65B47/08 B65B47/10 B65B61/06 B65B69/00 B65B9/04 B65D1/32 B65D47/10 B65D69/00 B65D75/36 B65D75/58 B65D77/20 B65D77/38 B65D81/32 B65D83/00 B65D85/804 B67D1/00 B67D1/04 B67D1/07 B67D1/08 B67D7/22 (Advanced/Invention); B65B9/04 B65D75/58 B65D81/32 B67D1/00 (Advanced/Non–invention); B65D81/00 B67D1/00 (Core/Invention); B67D (Subclass/Invention)

International class (IPC 1–7): B65B61/06 B65B69/00 B65B9/04 B65D75/58 B65D81/32 B67D1/00

CPC:

A47J31/4482 A47J31/56 B65B69/005 B65D1/32 B65D77/2064 B65D85/8043 B65D2577/2083 B65D77/38 B65B3/022 A47J31/407

European class: A47J31/40H A47J31/44B A47J31/56 B65B69/00D B65D1/32 B65D77/20E1B4 B65D85/804B L65D577/20P1

US class: 156/242 156/242S 206/229 206/229S 206/459.5 206/459.500S 220/203.08 222/107 222/129.1 222/148 222/148S 222/23 222/23S 222/514 222/514.4 222/541.4 222/541.6 222/541.600S 222/575 222/92 222/95 426/106 426/115 53/410 53/452 53/452S 99/275 99/275P 99/289.00R 99/289R 99/295 99/295P 99/302.00R 99/302R 99/323.3

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Forward Citations: WO16142932, WO16081480, WO16081477, WO16008823, WO15081145, WO15002105, WO15002104, WO15002101, WO15002099, WO15001130, WO14116246, WO13156932, WO13132450, WO13124811, WO13105036, WO13001416, WO12123462, WO12008825, WO11137018, WO11042489, WO10136601, WO10102665, WO09082198, WO09011571, WO09008875, WO08153383, WO07116068, WO07105944, WO07105944, WO07025773, WO07025773, USRE44458, USRE41273, USD654790, USD649390, US9676538, US9580291, US9573753, US9567155, US9565967, US9545171, US9526371, US9504348, US9499333, US9457928, US9439532, US9399570, US9365339, US9364018, US9327900, US9326636, US9320382, US9272827, US9260284, US9167935, US9161654, US9117326, US9027465, US8887938, US8857663, US8834948, US8834089, US8833241, US8814000, US8808775, US8784915, US8757222, US8740020, US8739840, US8702371, US8684601, US8677888, US8616869, US8616117, US8607692, US8590753, US8590282, US8565916, US8479643, US8477029, US8434642, US8328017, US8250972, US8181818, US8162176, US8028867, US7909165, US7757893, US7644821, US2016368688, US2016368687, US2016368686, US2016368685, US2016368651, US2016264350, US2016166998, US2016145026, US2015257586, US2015183627, US2015150409, US2015079240, US2015041493, US2014335239, US2014331867, US2014328980, US2014026761, US2013236609, US2013230627, US2013171320, US2013129876, US2013064937, US2013042941, US2013015206, US2013014648, US2012241455, US2012231126, US2012160927, US2011226343, US2011174168, US2011169192, US2011166910, US2011113971, US2011020508, US2010326283, US2010251901, US2010139496, US2010102959, US2010102930, US2010055252, US2009114099, NL1033968, KR101512013, JP2015009054, JP2015009053, JP2015009052, JP2015009051, JP2013542815, JP2013530107, JP2013525221, ITMO20120056, ITMO20120043, ITMO20120025, ITMO20120006, ITMO20100103, ITMI20111176, FR2945925, EP3017732, EP3017731, EP3017730, EP2682351, EP2563716, EP2430955, EP2332848, EP1762503, DE102011001252, CN104245539, CN104245539, CN103635123, CN103327856, CN103327856, CN103038155, CN103038155, CN102985354, CN102781290, CN102781290, CN102647929, AU2011328110, AU2011245560,

Abstract:
Source: US2008148948A The invention proposes to dispense a substance from a container (1) filled with a single portion of a substance. The container comprises a preformed deformable body, preferably made of sheet material, defining a filling cavity which body has an opening (6) and an integral planar circumferential rim (5) surrounding said opening, which opening is closed by a cover sheet (7) which is sealed to the circumferential rim (5) by means of a circumferential sealing seam (10). The container with the substance is opened by making use of the deformability of the cover sheet (7). A support surface supports the cover sheet (7) except at the position of a recess (10 b). The recess (10 b) is positioned at least over a part of the circumferential sealing seam. Upon compression of the container body the substance is pressurized and the cover sheet (7) bulges out into the recess (10 b) such that the sealing seam (10) is broken at the location where the bulge is formed resulting in the container being open.

0) US2003172624A – VERTICAL STAND–UP POUCH

11) Family number: 29081264 (US2003172624A) © PatBase

Title: VERTICAL STAND–UP POUCH

Priority:

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WILLIAM S; JEFFREY G; JEFFERY G; BRAXTON BOBBY W; BOBBY W; COLLIN P

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B31B1/26 B31B1/64 B31B31/26 B31B37/26 B65B11/58 B65B41/00 B65B47/00 B65B59/04 B65B61/00 B65B61/02 B65B61/18 B65B63/04 B65B9/02 B65B9/06 B65B9/067 B65B9/10 B65B9/20 B65B9/207 B65B9/213 B65B9/22 B65D30/10 B65D30/16 B65D30/20 B65D33/00 B65D33/16 B65D33/25 B65D33/30 B65D75/58 B65D77/02 C12C1/027 (Advanced/Invention);
B31B1/90 B65B9/06 B65B9/20 B65D30/16 B65D75/42 B65H5/28 (Advanced/Non–invention);
B31B37/00 B65B5/06 B65B9/06 B65B9/10 B65D30/16 (Core/Invention);
B65B (Subclass/Invention)

International class (IPC 1–7): B65B41/00 B65B47/00 B65B5/06 B65B61/02 B65B61/18 B65B9/00 B65B9/06 B65B9/10 B65B9/20 B65D30/10 B65D30/16 B65D33/00 B65D33/16 B65D33/25 C12C1/027

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US class: 206/484 206/494 221/281 221/70 383/104 383/104P 383/104S 383/121 383/121S 383/122 383/122S 383/62 383/62P 383/89 383/89S 426/106 426/106P 426/108 426/108S 426/87 426/87P 493/194 493/194S 493/243 493/243S 493/248 493/256 493/418 493/429 493/440 5/345.9 53/116 53/131.5 53/133.4 53/133.400S 53/139.2 53/139.200S 53/201 53/370.2 53/370.6 53/410 53/411 53/412 53/412P 53/412S 53/429 53/449 53/450 53/451 53/451P 53/451S 53/459 53/469 53/551 53/551P 53/551S 53/552 53/552S 53/591 534/100 534/110 534/510

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Forward Citations: WO16128865, WO16085161, WO16061063, WO16048667, WO15141256, WO15066503, WO15039945, WO15023408, WO14204465, WO14056776, WO13171469, WO13032762, WO12173857, WO07067228, WO07037800, USD788582, USD787319, USD784127, USD781702, USD778719, USD777026, USD772069, USD768479, USD766082, USD764914, USD761651, USD756219, USD754534, USD753996, USD753995, USD750477, USD748471, USD747646, USD747202, USD747195, USD747189, USD746673, USD740114, USD739232, USD734144, USD733549, USD730725, USD726535, USD725467, USD715643, USD661600, US9663282, US9656783, US9637277, US9637276, US9630761, US9630760, US9617026, US9540145, US9505525, US9499307, US9463146, US9371143, US9349308, US9296171, US9288976, US9284078, US9221590, US9205967, US9180999, US9162786, US9090396, US9061832, US8978348, US8938936, US8776484, US8764618, US8689531, US8689524, US8616768, US8608381, US8602244, US8602242, US8572932, US8528765, US8522516, US8517609, US8501308, US8402724, US8388886, US8334343, US8231024, US8197394, US8148466, US8146777, US8132395, US8129450, US8066137, US7975456, US7913477, US7908826, US7795333, US7780589, US7770355, US7757464, US7757460, US7726098, US7681732, US7674220, US7605199, US7516596, US7409810, US7385004, US7365123, US7325379, US7322169, US7305805, US7299608, US7275354, US7197859, US7191575, US7178313, US7032362, US6968669, US6895729, US2016075098, US2015135649, US2015052857, US2015020483, US2014185965, US2014041342, US2013223766, US2013206768, US2013192168, US2013126306, US2013113825, US2012312868, US2012208171, US2012088009, US2012055120, US2011284550, US2011217447, US2011131935, US2011107729, US2011083810, US2011083402, US2010269451, US2010264173, US2010263326, US2010263325, US2010167894, US2010140129, US2010072205, US2010061665, US2010054636, US2010037567, US2009288376, US2009241478, US2009232424, US2009211205, US2009194554, US2009194553, US2009178945, US2009162496, US2009161995, US2009113852, US2009087522, US2009047395, US2009042706, US2009022431, US2008295459, US2008274239, US2008273821, US2008271418, US2008163589, US2008154221, US2008113070, US2008063322, US2008032110, US2008000202, US2008000200, US2007248292, US2007175181, US2007128386, US2007104905, US2007095021, US2007062161, US2006285781, US2006251342, US2006204150, US2006183857, US2006183856, US2006182917, US2006156696, US2006144021, US2006144020, US2006144019, US2006140514, US2006107619, US2005262815, US2005241988, US2005238766, US2005235610, US2005210840, US2005131119, US2005115211, US2004161174, US2004142805, US2004091183, US2004084512, US2004083685, US2004083684, US2003144122, TWI542515, KR101663419, KR101561217, JP4718615, JP2012041051, JP2011006148, JP2009515791, JP2008155963, JP2008127057, JP2006232383, FR2962717, ES2395272, EP2716566, EP2520424, EP2487112, EP2332841, EP1988033, EP1988021, EP1595811, DE10359107, DE10359106, DE102011075466, DE102005005947, DE102004061825, DE102004007826, DE102004007825, CN104494961, CN104494961, CN104260951, CN104175598, CN103764509, CN103764509, CN103568365, CN103568365, CN102717935, CN102633002, CN102633002, CN102582128, CN101827706, AU2013302308, AU2012300504, AU2006323202,

Abstract:
Source: US2003172624A A vertical stand−up pouch or flexible package, and method for manufacturing same, constructed by modification to existing vertical form and fill packaging machines. The invention involves producing a vertical stand−up pouch from a single sheet of packaging film by creating a vertical crease along one edge of a packaging film tube prior to forming a transverse seal on the tube. Said vertical crease is formed using a stationary tucker bar positioned outside the packaging film tube and between two forming plates positioned inside the packaging film tube.

0) US2012318805A – INSULATED CONTAINER

12) Family number: 52582717 (US2012318805A) © PatBase

Title: INSULATED CONTAINER

Priority:

AU20120302251 20120607 AU20160204692 20160707 US20110498435P 20110617
US20110498415P 20110617 CN201280034350 20120607 GB20140000762 20120607
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Family:

Publication number	Publication date	Application number	Application date
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WO13101301 A3	20131003	WO2012US43016	20120618	

Probable Assignee: BERRY PLASTIC CORP

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Assignee(s): CREDIT SUISSE CAYMAN ISLANDS BRANCH AG ; BANK OF AMERICA NA ; US BANK NATIONAL ASSOCIATION

Inventor(s):(std)**:** WALLACE CHARLES TYLER ; WALLACE CHARLES T ; WALKER CHARLES T ; SVETLANA I CONTRADA ; RANDY A BOWLDS ; PHILIP A DRISKILL ; PALADINO JASON JOSEPH ; PALADINO JASON J ; MILAN C MARAVICH ; MARAVICH MILAN CHRISTOPHER ; MARAVICH MILAN C ; MANN JEFFREY ALLEN ; MANN JEFFREY A ; LESER CHRIS KYLE ; LESER CHRIS K ; JOHN B EULER ; JEFFREY A MANN ; JASON J PALADINO ; EULER JOHN BRYAN ; EULER JOHN B ; DRISKILL PHILLIP A ; DRISKILL PHILIP ANDREW ; DRISKILL PHILIP A ; DRISKILL PHILIIP A ; DAVIS DANIEL O ; DAVIS DANIE O ; DANIEL O DAVIS ; CONTRADA SVETLANA I ; CONTRADA SVETLANA ; CONTRADA STEVLANA I ; CHRIS K LESER ; CHARLES T WALLACE ; BOWLDS RANDY A ; WALLACE CHARLES ; CONTRADA SVETLANA L

Inventor(s): 10 JEFFREY A MANN

Agent(s): SPRUSON AND FERGUSON; SMART AND BIGGAR; WELLS ANDREW; CARVAJAL Y ISABEL; SABA AND CO TMP; TORINO SHOJI; SPRUSON AND FERGUSON ASIA PTE LTD; BARNES AND THORNBURG LLP; BARNES AND THOMBURG LLP; REZEK RICHARD A; REZEK RICHARD A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A47G19/22 A47G19/23 A47G23/02 A47J41/00 B23P11/00 B29B11/10 B29B11/14 B29C33/56 B29C43/22 B29C44/04 B29C44/56 B29C47/00 B29C47/06 B29C47/36 B29C47/50 B29C51/08 B29C53/38 B29C65/00 B29C65/02 B29C65/06 B29C65/18 B29C65/48 B29C65/52 B29C70/42 B29D22/00 B29D23/00 B29D24/00 B31B1/00 B31B1/26 B31B1/88 B31B50/00 B31C7/00 B31D1/00 B31F1/00 B32B1/02 B32B1/08 B32B29/00 B32B33/00 B32B37/04 B32B37/06 B32B37/10 B32B37/14 B32B37/15 B32B37/18 B32B37/30 B32B38/00 B32B38/14 B32B43/00 B32B5/18 B41F3/00 B41M1/30 B41M5/00 B65D1/00 B65D1/40 B65D25/34 B65D25/36 B65D3/00 B65D3/06 B65D3/14 B65D3/22 B65D3/28 B65D5/40 B65D6/02 B65D81/38 B65D85/00 C08F10/02 C08F10/06 C08F110/06 C08F210/02 C08J5/00 C08J5/12 C08J5/18 C08J9/00 C08J9/04 C08J9/06

C08J9/08 C08J9/12 C08J9/228 C08K3/00 C08K3/22 C08K3/26 C08K3/34 C08K5/09 C08K5/092 C08K5/20 C08L23/04 C08L23/06 C08L23/10 C08L23/12 C08L23/14 C08L31/04 C09J5/06 C09J7/02 E04B1/78 (Advanced/Invention); A47G19/22 B29C53/36 B29D22/00 B29D23/00 B29L31/00 B32B1/02 B32B1/08 B32B33/00 B32B37/12 B32B37/15 B65D1/40 B65D65/40 B65D90/06 C08J9/06 C08J9/12 C08K3/22 C08L23/04 C08L23/06 C08L23/08 C08L23/12 C08L23/14 E04B1/78 (Advanced/Non–invention)

CPC: B29C65/06 B29C65/0672 B29C66/5344 B65D43/0212 B65D2543/00046 B65D2543/00092 B65D2543/00296 B65D2543/00351 B65D2543/00509 B65D2543/00537 B65D2543/00555 B65D2543/00629 B65D2543/00685 B65D2543/00731 B65D2543/00796 B29C43/02 B65D81/38 B31B1/26 C08J9/00 B29D22/00 B29D23/00 B32B1/02 B32B1/08 B32B33/00 B65D1/40 C08J9/0066 C08J9/0095 C08J9/04 C08J9/12 C08J2201/03 C08J2205/04 C08J2323/04 C08J2323/12 C08L23/04 C08L23/06 C08L23/08 C08L23/10 C08L23/12 C08L23/14 E04B1/78 C08J9/0061 C08J2423/12 C08J9/0023 C08J9/122 B29C65/48 Y10T29/49826 B65D3/06 B65D81/3876 Y10T428/1393 C08L2205/025 C08L2205/03 C08L2205/24 B65D65/40 B65D90/06 A47J41/00 B29C44/0446 B29C44/569 B29C47/0021 B29C47/004 B29C47/0042 B29C47/0064 B29C47/0066 B29C47/0069 B29C47/065 B29C47/366 B29C47/50 B29C51/08 B29C53/36 B32B37/12 B32B37/153 B32B38/145 B32B2323/10 B32B2439/02 B65D2203/00 Y10T428/1348 Y10T428/1376 Y10T428/139 Y10T428/1397 Y10T428/1476 Y10T428/28 B65D81/3865 B65D5/40 A47G19/2288 C08J2205/10 C08J2423/06 A47G19/2205 C08J9/06 B31B2201/88 B31B2217/0084 B32B37/14 B32B38/0004 B32B37/10 B32B2307/102 B32B2439/00 B41F3/00 B65D81/3879 B65D81/3867 C08J9/08 B31B1/00 C08J2203/06 C08K2003/2241 B32B1/00 B32B27/08 B32B27/32 B65D81/3881 B65D81/3874 B29C65/02 B29C66/1122 B29C66/1282 B29C66/12881 B29C66/14 B29C66/341 B29C66/4322 B29C66/71 B29C66/723 B29C66/727 B29C66/73713 B29L2031/7132 B31B2217/062 B31B2217/064 B31B2217/082 B31F1/0038 B65D3/14 B31B2203/062 B31B2203/064 B31B2203/082 Y10T428/249953 Y10T428/249958

European class: B65D3/14 B65D81/38H4

US class: 1/1 101/483 156/250 156/277 156/303.1 156/304.2 156/304.5 156/304.6 156/307.3 156/307.5 156/308.2 156/308.4 156/73.5 220/592.17 220/592.2 220/592.25 220/628 220/660 220/739 229/103.11 229/403 252/62 29/428 428/304.4 428/308.4 428/343 428/35.6 428/36.5 428/36.9 428/36.92 428/41.8 493/320 493/55

Classification Explorer

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Abstract:
Source: US2012318805A A container is formed to include an interior region and a mouth opening into the interior region. The container includes a floor and a side wall coupled to the floor to define the interior region between the floor and the side wall

13) Family number: 53291841 (US2013075296A) © PatBase

Title: MARKING OF CAN ENDS AND/OR PULL TABS USING PHOTONICALLY SENSITIVE INK

Priority: AU20120316033 20120927 AU20160201319 20160301 US20120628968 20120927 US20120347796 20120927 US20120345547 20120927 US20110539784P 20110927 US20120629071 20120927 WO2012US57507 20120927 WO2012US57518 20120927

Family:

Publication number	Publication date	Application number	Application date
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AU2012316040 AA	20130404	AU20120316040	20120927
AU2016201319 AA	20160317	AU20160201319	20160301
AU2016201319 BB	20170504	AU20160201319	20160301
BR112014007448 A2	20170404	BR20141107448	20120927
BR112014007452 A2	20170425	BR20141107452	20120927
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CA2850176 AA	20140326	CA20122850176	20120927
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CO6920278 A2	20140410	CO20140066693	20140328
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MX2014003640 A1	20140521	MX20140003640	20120927
MX2014003772 A1	20140801	MX20140003772	20120927
MX337706 B	20160315	MX20140003640	20120927
RU2014116968 A	20151110	RU20140116968	20120927
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SG11201400991W A	20140428	SG20141100991	20120927
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TH143434 A	20151012	TH20141001665	20120927
TH145720 A	20160215	TH20141001716	20120927
US2013075296 AA	20130328	US20120629071	20120927
US2014084003 AA	20140327	US20120628968	20120927
US2014291322 AA	20141002	US20120347796	20120927
US2015034649 AA	20150205	US20120345547	20120927
US9187221 BB	20151117	US20120628968	20120927
US9278776 BB	20160308	US20120345547	20120927
US9637267 BB	20170502	US20120347796	20120927
WO13049313 A2	20130404	WO2012US57507	20120927
WO13049313 A3	20130523	WO2012US57507	20120927
WO13049320 A1	20130404	WO2012US57518	20120927

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std): CROWN PACKAGING TECHNOLOGY INC ; CROWN PACKAGING TECHONOLOGY INC ; VAUGHAN LAURA JANE ; GROWN PACKAGING TECHNOLOGY INC ; KRAUN

PEKEDZHING TEKNOLODZHI INK

Assignee(s): COLVILLE STEPHEN MILES ; RAMSEY CHRISTOPHER PAUL ; MCGIRR LAURA JANE ; DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS

Inventor(s):(std)**:** CHRISTOPHER PAUL RAMSEY ; COLVILLE STEPHEN MILES ; CRISTOPHER PAUL RAMSEY ; LAURA JANE MCGIRR ; MAKDZHIRR LAURA DZHEJN ; MCGIRR LAURA JANE ; RAMSEY CHRISTOPHER PAUL ; REMSI KRISTOFER POL ; STEPHEN MILES COLVILLE ; VAUGHAN LAURA JANE

Agent(s): PETER MAXWELL AND ASSOCIATES; GOWLING LAFLEUR HENDERSON LLP; SILVANA MARIA LOPEZ DIAZ; LIND ROBERT; INO SARI; DESHIMARU TAKESHI; MATSUSHITA MITSURU; KURASAWA ICHIRO; KUMAKURA YOSHIO; BAKER AND HOSTETLER LLP; FULLMER HAROLD H

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B05D3/06 B21D51/38 B21D51/44 B23K26/00 B23K26/36 B41M5/26 B41M5/28 B41M5/30 B41M5/323 B41M5/46 B65B43/00 B65D17/00 B65D17/34 B65D17/347 B65D17/353 B65D25/20 B65D41/32 B65D51/00 B65D51/24 G06K1/12 G06K19/06 G06K19/10 G06K7/00 (Advanced/Invention);
B21D51/38 B41M5/24 (Advanced/Non–invention);
B41M5/26 B65D17/00 G06K19/06 (Core/Invention);
B41M B65D G06K (Subclass/Invention)

CPC: B65D17/161 B21D51/383 B65D41/32 B41M5/24 B41M5/28 B65D17/165 B65D2517/0052 B65D2517/0053 B65B61/26 B65D51/245 B65B43/00 B65D51/00 B23K26/364 B23K26/361

US class: 1/1 206/459.5 219/121.85 220/212 220/270 220/273 413/14 413/18 413/25 427/556 53/492

Classification Explorer

Cited documents: WO9909853 A2, WO9711892 A1, WO9530546 A1, WO09093028 A2, WO07007102 A2, WO05068207 A1, WO02068205 A1, WO0183308 A1, WO0168460 A2, WO0043456 A1, WO0003832 A1, US8543424 BB, US7914640 BB, US7485403 BB, US7150597 BB, US6926487 BA, US6854947 BB, US6777098 BB, US6706995 BB, US6634516 BB, US6602595 BB, US6590183 BA, US6501046 BA, US6498318 BA, US6479787 BA, US6476349 BA, US6433302 BA, US6157314 A, US6105806 A, US6080958 A, US6019831 A, US6017972 A, US5992892 A, US5928780 A, US5911921 A, US5884079 A, US5682983 A, US5578120 A, US5511920 A, US5492077 A, US5489639 A, US5350792 A, US5273149 A, US5053440 A, US4880137 A, US4559961 A, US4559729 A, US4476781 A, US4375025 A, US3898417 A, US2013270269 AA, US2013196037 AA, US2012205386 AA, US2011226636 AA, US2011111142 AA, US2011100854 AA, US2011084051 AA, US2010264215 AA, US2010193519 AA, US2010078010 AA, US2010058630 AA, US2010056830 AA, US2010015558 AA, US2009117353 AA, US2007080229 AA, US2005270358 AA, US2005045637 AA, US2004108237 AA, US2003192211 AA, US2001011431 AA, JPS4982340, JP8127670 A2, JP4982340 B2, JP49082340 A2, JP2011020701 A2, JP2011016546 A2, JP2010004523 A2, JP2005324816 A2, JP2001063729 A2, JP11001065 A2, GB2309215 A1, EP1365923 B1, EP1365923 A1, EP1218248 B1, EP1218248 A2, EP1113901 A1, EP0993964 A2, EP0797511 A1, EP0522370 A1, DE10254060 A1, CN201890427 U, CN101445170 A, CA2307074 AA, CA2301655 AA, CA2301655,

Forward Citations: WO17012344, WO17008725, WO16192419, WO16183452, WO15013081, WO14072455, WO14072455, USD776530, USD688553, US9340368, US9259913, CN105819062, CN105691824, CN105517924, CN105398647, CN105151470, CN105151469, AU2014293487,

Abstract:
Source: US2013075296A A system and method for laser marking can ends, especially pull tabs, includes coating a portion of the can end and/or pull tab with a lacquer having a photonically active material and directing a laser to the lacquer to alter the appearance of the of the photonically active material to form an image, especially a high resolution image. The decorated can end and/or tabs may have a high resolution image.

0) US2005173425A – INSULATING MICROWAVE INTERACTIVE PACKAGING

14) Family number: 47490290 (US2005173425A) © PatBase

Title: INSULATING MICROWAVE INTERACTIVE PACKAGING

Priority:

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Family:

Publication number	Publication date	Application number	Application date
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CA2706625 AA	20061012	CA20062706625	20060327
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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A47J27/00 A47J36/02 A47J36/04 B32B1/02 B32B27/00 B32B27/10 B32B27/36 B32B29/00 B32B5/00 B32B7/02 B65B1/00 B65B11/02 B65D30/02 B65D33/00 B65D5/50 B65D5/52 B65D5/54 B65D65/14 B65D65/40 B65D81/03 B65D81/18 B65D81/24 B65D81/34 B65D81/38 H05B6/64 H05B6/74 H05B6/80 (Advanced/Invention);
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Abstract:
Source: US2005173425A The combination of insulating material with microwave interactive food packaging for enhanced cooking properties is disclosed. An insulating microwave packaging material (200) and a method of making the same are also disclosed. In one embodiment, the insulating microwave packaging material (200) is formed by bonding a microwave interactive material substrate (205) that creates sensible heat upon exposure to microwave energy to a second substrate (210) along bond lines (212) arranged in a pattern to form closed cells (214). Upon impingement of the insulating microwave packaging material (200) by microwave energy in a microwave oven, the closed cells (214) expand to form insulating pockets (216). One side of the insulating pocket (216) bulges and lofts above the opposite side. When a food product is situated on the insulating microwave packaging material (200), the insulating pockets (216) insulate the food product from the microwave oven environment.

15) Family number: 15499551 (US6227446B)

© PatBase

Title: Automated transaction machine note storage and delivery mechanism

Priority: EP19990962782 19991115 US19980109590 19981123 US19990313020 19990517 US19990313021 19990517 US19990155820P 19990923 US19980109590P 19981123 WO1999US27194 19991115 US19990313480 19990517 US19990313025 19990517 US19990313023 19990517 US19990313024 19990517 US20000664659 20000919

Family:

Publication number	Publication date	Application number	Application date
AR021367 AA	20020717	AR1999P105949	19991123
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BRPI9914652 B1	20150908	BR1999PI14652	19991115
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CA2343773 C	20060509	CA19992343773	19991115
CN100341026 C	20071003	CN20031057911	19991115
CN100354901 C	20071212	CN20031057910	19991115
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CN1326572 B	20121003	CN19998013543	19991115
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EP1901242 A2	20080319	EP20070020476	19991115
EP1901242 A3	20150128	EP20070020476	19991115
EP1901243 A2	20080319	EP20070020477	19991115
EP1901243 A3	20150128	EP20070020477	19991115
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EP1901244 A3	20150128	EP20070020478	19991115
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EP1901245 A3	20150128	EP20070020479	19991115
EP1901246 A2	20080319	EP20070020480	19991115
EP1901246 A3	20140827	EP20070020480	19991115
IN00670MN2004 A	20070824	IN2004MN00670	20041123
IN00671MN2004 A	20061006	IN2004MN00671	20041123
IN00672MN2004 A	20070914	IN2004MN00672	20041123
IN00673MN2004 A	20070817	IN2004MN00673	20041123
IN00674MN2004 A	20070316	IN2004MN00674	20041123
IN218759 B	20080613	IN2001MN00257	20010309
IN218760 B	20080613	IN2004MN00670	20041123
IN218832 B	20080613	IN2004MN00671	20041122
IN218833 B	20080613	IN2004MN00672	20041123
IN218834 B	20080613	IN2004MN00673	20041123
IN218836 B	20081017	IN2004MN00674	20041123
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TH40126 A	20000907	TH19991004036	19991028

US6227446 BA	20010508	US19990313020	19990517	
US6264102 BA	20010724	US19990313023	19990517	
US6270010 BA	20010807	US19990313021	19990517	
US6367691 BA	20020409	US19990313024	19990517	
US6367692 BA	20020409	US19990313025	19990517	
US6371368 BA	20020416	US19990313480	19990517	
US6607124 BA	20030819	US20000664659	20000919	
WO0031670 A1	20000602	WO1999US27194	19991115	
ZA200101331 A	20010919	ZA20010001331	20010216	

Probable Assignee: DIEBOLD INC

Assignee(s):(std)**:** DIEBOLD INC ; DIEBOLD INCORP

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Inventor(s):(std)**:** ANDREW JUNKINS ; ANDREW TKINS ; DZHANKINS EHNDRJU ; ELIZABETH HALIRA ; ELIZABETH HERRERA ; FORCE MATHEW ; FORCE MATTHEW ; FORS MEHT JU ; GRAEF H THOMAS ; GRAEF H THOMAS H ; GRAEF HTHOMAS ; GRAEF KH TOMAS ; GRAEF THOMAS H ; H THOMAS GRAEF ; HANEY S ; HANEY SEAN ; HERRERA ELIZABETH ; HERRERA ELIZABETH M ; JUNKINS ANDREW ; JUNKINS ANDREW OWENS MARK SMIT ; M OWENS ; MARK D SMITH ; MARK OWENS ; MATHEW FORCE ; MATTHEW FORCE ; MATTHEW FORTH ; MD SMITH ; MILLER ROBERT G ; OUEHNS MARK ; OWENS M ; OWENS MARK ; RAMACHANDRAN NAT ; ROBERT G MILLER ; S HANEY ; SEAN HANEY ; SMIT MARK D ; SMITH M D ; SMITH MARK D ; THOMAS GRAEF H ; THOMAS GREYF H ; KHEHNI SIN ; KHERRERA EHLIZABET

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Agent(s): DIMOCK STRATTON LLP; CARLOS REINALDO OLARTE GARCIA; MELDRUM DAVID JAMES ET AL; MELDRUM DAVID JAMES

Designated states: AL AT BE BR CA CH CN CY DE DK ES FI FR GB GR IE IN IT LT LU LV MC MK MX NL PL PT RO RU SE SI ZA

International class (IPC 8–9): B65H29/16 G06F17/60 G06Q30/00 G06Q40/00 G07D11/00 G07F19/00 G07F5/00 G07F7/00 G07F7/04 (Advanced/Invention); B65H29/16 G06Q30/00 G06Q40/00 G07D11/00 G07F19/00 G07F5/00 G07F7/00 (Core/Invention); G06F (Subclass/Invention)

International class (IPC 1–7): B65H29/16 G06F17/60 G06F7/08 G06K 15/00 G06K15/00 G07D11/00 G07F19/00 G07F7/00

CPC: B65H29/006 B65H2301/4191 B65H2701/1912 G07D11/0057 G07D11/0081 G07F19/20 G07F19/203 G06Q20/042 G06Q20/1085 G07D11/0003

European class: B65H29/00E G06Q20/042 G06Q20/1085 G07D11/00D G07D11/00F2B G07D11/00H G07F19/00F G07F19/20 G07F19/203 L65H301/4191 L65H341/910 L65H701/1912

US class: 235/375 235/379 235/380 235/381 242/356.7 242/538 285/375 705/43 705/45 902/12

Classification Explorer

Cited documents: WO9805007 A1, WO9713225 A1, WO9324404 A1, US749260, US6527172 BA, US6502746 BA, US6422458 BA, US6206284 BA, US6129273 A, US6095417 A, US6092798 A, US6027025 A, US6006989 A, US6006209 A, US5975273 A, US5959278 A, US5924079 A, US5841464 A, US5760414 A, US5756979 A, US5735516 A, US5680935 A, US5650605 A, US5648880 A, US5597996 A, US5563394 A, US5533627 A, US5508500 A, US5372361 A, US5336873 A, US5335484 A, US5267826 A, US5250788 A, US5116043 A, US5005730 A, US4977583 A, US4890824 A, US4889978 A, US4883183 A, US4871125 A, US4816652 A, US4784274 A, US4775783 A, US4708901 A, US4704061 A, US4695850 A, US4670643 A, US4659008 A, US4542287 A, US4515288 A, US4513880 A, US4510381 A, US4473157 A, US4456234 A, US4365700 A, US4337864 A, US4249552 A, US4166945 A, US4089725 A, US3749330 A, US2482242 A, US2151570 A, US2001020638 AA, JP64021693 A2, JP6060246 A2, JP57212568 A2, JP2311984 A2, JP2002133094 A2, GB2244838 A1, EP0795842 A2,

Forward Citations:

WO09153330, WO09022955, WO07055641, WO06065169, WO06041887, WO04081739, WO03040909, WO03040909, WO0227626, US9365805, US9311671, US9309490, US9309489, US9105145, US9014845, US8967389, US8945314, US8874937, US8853144, US8841246, US8795065, US8795064, US8771074, US8756158, US8740063, US8725297, US8708231, US8690052, US8679366, US8636918, US8632007, US8608060, US8600890, US8600889, US8600888, US8600887, US8583522, US8571952, US8560451, US8554677, US8543507, US8407119, US8282488, US8256603, US8136723, US8132718, US8109379, US8104706, US8100323, US8100250, US8092284, US8058374, US8052047, US8038527, US8032415, US7992775, US7934642, US7896148, US7851571, US7819308, US7810628, US7699155, US7681707, US7680710, US7658668, US7654442, US7611140, US7584883, US7559460, US7556259, US7536325, US7513417, US7500568, US7490823, US7460918, US7422095, US7366750, US7360683, US7340415, US7303117, US7175015, US7093751, US7066335, US7025255, US6983880, US6889897, US6848612, US6798899, US6786479, US6773009, US6427998, US2013186730, US2013134215, US2011209966, US2011190929, US2011134044, US2010181161, US2010164163, US2010131407, US2010100245, US2010100230, US2010082355, US2010070392, US2010069280, US2010010904, US2009204519, US2009120760, US2009118860, US2009108059, US2009051103, US2009050440, US2008149698, US2008149455, US2008128490, US2008128487, US2008082207, US2008067235, US2008065545, US2008065544, US2008065543, US2008065542, US2008065541, US2008065539, US2008065538, US2008065536, US2007240966, US2007216081, US2007187485, US2007151827, US2007102863, US2006283685, US2006259427, US2006225986, US2006208413, US2006186190, US2006148551, US2006118382, US2006086784, US2006038005, US2005275366, US2005194233, US2005167488, US2005131792, US2004222288, US2004212141, US2004192434, US2004127284, US2004064375, US2004010696, US2004010597, US2003229506, US2003172027, US2003158819, US2003156740, US2003141360, US2003139984, US2003131247, US2003127509, US2003074316, US2002198830, US2002194127, US2002194126, US2002093133, US2002085245, US2002053767, US2002053594, US2001020638, TWI308305, RU2510531, EP2763108, EP2176841, EP1734489, EP1659545, EP1577855, EP1510979, EP1344736, EP1344736, EA8554, EA008554, EA008094, DE10249997, CN102800162,

Abstract:
Source: US6227446B An automated transaction machine (10) includes a note receiving and dispensing mechanism (77). The mechanism includes a storage reel (66), a take−up reel (68) and a flexible web (70) extending between the reels. The note receiving and dispensing mechanism is housed within a note storage module (44). Notes are selectively passed into and out of the storage module to a passage area (92). The machine further includes a note inlet opening (30) and a note outlet opening (28). A note outlet transport (96) extends between the passage area and the note outlet opening. A note inlet transport (98) extends between the passage area and the note inlet opening. A note validator (58) extends adjacent to the note inlet transport for purposes of sensing the validity of notes inserted in the machine. The machine is selectively operative responsive to inputs to receive and deliver notes. The machine is further operative to enable replenishment of notes therein without accessing the interior of the housing.

16) Family number: 58394270 (US2015027327A) © PatBase

Title: APPARATUS AND METHOD FOR ORIENTING A BEVERAGE CONTAINER END CLOSURE AND APPLYING INDICIA IN A PREDETERMINED LOCATION

Priority: US20130859115P 20130726 US20140332618 20140716 US20150844789 20150903 WO2014US46868 20140716

Family:

Publication number	Publication date	Application number	Application date
AU2014293487 AA	20150129	AU20140293487	20140716
AU2014293487 BB	20170119	AU20140293487	20140716
CA2918084 AA	20160111	CA20142918084	20140716
CL2016000177 A1	20161021	CL20160000177	20160122
CN105517924 A	20160420	CN201480049368	20140716
CO16050109 A2	20160620	CO20160050109	20160226
EP3024749 A1	20160601	EP20140829044	20140716
GT201600019 A	20170104	GT20160000019	20160122
MX2016000949 A1	20160428	MX20160000949	20140716
TH159886 A	20170127	TH20161000438	20140716
US2015027327 AA	20150129	US20140332618	20140716
US2015375943 AA	20151231	US20150844789	20150903
US9259913 BB	20160216	US20140332618	20140716
US9340368 BB	20160517	US20150844789	20150903
WO15013081 A1	20150129	WO2014US46868	20140716
WO17039765 A1	20170309	WO2016US32736	20160516

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP

Assignee(s): ELLEFSON DEAN C

Inventor(s):(std)**:** ARCHER EDWARD D ; CONINGSBY GREGG ; ELLEFSON DEAN C

Inventor(s): DEAN C ELLEFSON

Agent(s): MADDERNS PATENT AND TRADE MARK ATTORNEYS; SMART AND BIGGAR; JOHANSSON AND LANGLOIS LTDA; JUAN PABLO CADENA SARMIENTO; EISENFUEHR SPEISER; SHERIDAN ROSS PC; KUGLER BRUCE A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/04 B21D51/44 B41F17/00 B41F17/16 B41F17/22 B41F17/28 B65D17/00 B65G47/24 B65G47/244 B65G47/248 B65G47/84 B65G47/88 B65G49/00 (Advanced/Invention); B21D51/44 B65D17/00 B65G47/84 (Advanced/Non–invention); B65D17/00 (Core/Invention)

CPC: B41F17/00 B65G49/00 B21D51/44 B41F17/006 B41F17/16 B65D17/165 B65D2203/00 B65G47/841 B21D43/003 B41F17/22 B41F17/002 B41F17/28 B65G47/244

US class: 1/1 101/40.1 101/41 198/382 198/416

Classification Explorer

Cited documents: WO9909853 A2, WO14072455 A2, WO14008544 A1, WO13049320 A1, WO13049313 A2, WO11115815 A1, WO11050346 A2, WO07007102 A2, WO0047487 A1, USD379065 S1, USD365021 S1, US8430228 BB, US7914640 BB, US7108469 BB, US6877607 BB, US6868627 BB, US6808351 BA, US6706995 BB, US6659833 BA, US6634516 BB,

US6533518 BA, US6524048 BA, US6382440 BA, US6244456 BA, US6105806 A, US6053349 A, US5992892 A, US5893286 A, US5492077 A, US5233922 A, US5058724 A, US4781112 A, US4746002 A, US4203240 A, US4016968 A, US3706368 A, US3628650 A, US3580380 A, US2968387 A, US2764933 A, US2015217559 AA, US2015027327 AA, US2014360394 AA, US2013075296 AA, US2012137837 AA, US2011226719 AA, US2011226636 AA, US2011115815 AA, US2011100854 AA, US2011084051 AA, US2011050346 AA, US2010058896 AA, US2008110888 AA, US2006140746 AA, US2005082299 AA, US2005045637 AA, US2004123444 AA, US2003192211 AA, US2003126731 AA, US1878541 A, US1257710 A, GB2428668 A1, GB2428659 A1, CN104024115 A,

Forward Citations: WO17039765, WO16181305, US9340368, US2016016687,

Abstract:
Source: US2015027327A An apparatus and method of orienting and decorating container end closures is provided. More specifically, the present invention relates to apparatus and methods used to position container end closures in a predetermined orientation and then decorate a predetermined portion of the end closures.

0) US5547103A – BEVERAGE CONTAINER WITH SELF–CONTAINED DRINKING...

17) Family number: 29229550 (US5547103A) © PatBase

Title: BEVERAGE CONTAINER WITH SELF–CONTAINED DRINKING STRAW

Priority: US19940301228 19940906 US19960699546 19960819 WO1998US10117 19980515 US19970856837 19970515 US20000503514 20000214 WO1995US11417 19950906

Family:

Publication number	Publication date	Application number	Application date
AT194125 E	20000715	AT19950931774T	19950906
AU199535087 A1	19960327	AU19950035087	19950906
AU199876875 A1	19981208	AU19980076875	19980515
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BRPI9809122 A	20000801	BR1998PI09122	19980515
CA2199386 AA	19970306	CA19952199386	19950906
CA2289660 AA	19991115	CA19982289660	19980515
CN1275058 A	20001129	CN19988005132	19980515
DE69517691 D1	20000803	DE19956017691	19950906
DE69517691 T2	20010315	DE19956017691T	19950906
EP0779873 A1	19970625	EP19950931774	19950906
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EP0779873 B1	20000628	EP19950931774	19950906
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JP2002515844 T2	20020528	JP19980549657T	19980515
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KR20010012607 A	20010215	KR19997010566	19991115
MX9701700 A1	19971031	MX19970001700	19950906
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US6056149 A	20000502	US19970856837	19970515
US6193101 BA	20010227	US20000503514	20000214
WO9607602 A1	19960314	WO1995US11417	19950906
WO9851200 A1	19981119	WO1998US10117	19980515

Probable Assignee: POPSTRAW CO LLC

Assignee(s):(std)**:** MK IND ; POPSTRAW CO LLC ; POPSTRAW LLC ; THE POPSTRAW COMPANY LLC ; POPSTRAW COMPANY LLC ; POPSTRAW CO ; POPSTRAW COMPANY LLC THE ; POPSTRAW COMPANY

Assignee(s): SZASZ DAVID A ; POPSTRAW CO LLC THE ; THE POPSTRAW LLC ; WHITEHEAD ROSS ; KURTZ JAMES H JR ; THE POPSTRAW CO LLC ; MK IND INC ; MK INDUSTRIES ; MURPHY PETER F

Inventor(s):(std)**:** KURTZ H ; KURTZ JAMES H ; KURTZ JAMES H JR ; KURTZ JAMES HJR ; KURTZ JR JAMES H ; MURPHY F ; MURPHY PETER F ; PETER F MURPHY ; ROSS WHITE HEAD ; ROSS WHITEHEAD ; SZASZ A ; SZASZ DAVID A ; TAYLOR JON ; WHITEHEAD ROSS ; BREWER DOUG ; BROWN DAVE ; DAVID A SZASZ ; DOCZY PAUL ; HEAD ROSS WHITE ; JAMES H KURTZ JR

Inventor(s): JR KURTZ JAMES H

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; MACRAE AND CO

Designated states:	AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GE GH GM GN GR GW HU ID IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG UZ VN YU ZW
International class (IPC 8–9):	A47G19/22 B65D17/00 B65D25/02 B65D47/06 B65D49/00 B65D77/28 B65D83/00 (Advanced/Invention); B65D17/00 B65D25/02 B65D47/06 B65D49/00 B65D83/00 (Advanced/Non–invention); B65D47/06 B65D49/00 B65D77/24 (Core/Invention)
International class (IPC 1–7):	A47G19/22 A47G21/18 B65D25/02 B65D47/06 B65D77/28 B65D83/00
CPC:	B65D2517/0049 B65D17/165 B65D77/283
European class:	B65D17/16B2 B65D77/28C L65D517/00Y6A
US class:	215/388 215/389 220/705 220/706 220/709 220/710 239/33
Classification Explorer	
Cited documents:	WO8504850 A1, US6056149 A, US6000573 A, US5819979 A, US5586681 A, US5547103 A, US5431297 A, US5253779 A, US5244112 A, US5172827 A, US5160058 A, US5080247 A, US5054639 A, US4948008 A, US4930652 A, US4925040 A, US4923084 A, US4923083 A, US4892187 A, US4877148 A, US4842157 A, US4826034 A, US4728001 A, US4712702 A, US4709829 A, US4690294 A, US4582213 A, US4561557 A, US4537324 A, US4462503 A, US4424913 A, US4356927 A, US4305521 A, US4228913 A, US4226356 A, US4109817 A, US4078692 A, US3946895 A, US3776458 A, US3746197 A, US3717476 A, US3656654 A, US3547308 A, US3349955 A, US3295715 A, US3263855 A, US3259297 A, US1309994 A, JP4072149 A2, JP4044955 A2, JP3098877 A2, FR2627753 A3, FR2615487 A1, FR2590237 A1, DE2650488 A1,
Forward Citations:	WO9930988, WO9930979, WO9926861, WO9851582, WO9737904, WO11107123, WO11054472, USD787088, USD749749, USD741495, USD655121, USD638244, USD612549, USD602650, USD461679, US8727184, US8459492, US8181831, US7909176, US7878363, US7753284, US7726259, US7516869, US7461757, US7392916, US6955305, US6945425, US6676032, US6672249, US6499430, US6431382, US6375092, US6354460, US6234342, US6230913, US6193101, US6158611, US6131763, US6123189, US6095368, US6056149, US6000573, US5975340, US5899351, US5819979, US5713664, US2010326362, US2010288794, US2009256000, US2008073415, US2007241118, US2007095295, US2007084871, US2006054629, US2004245257, US2004158281, US2004118769, US2003078605, GB2447932, EP0933308, DE20307925, DE202004013809, DE102013009169, DE102010023861, DE102010010352,

Abstract:
Source: US5547103A A beverage container having a straw–dispensing mechanism that is disposed within the container and is responsive to appropriate manipulation of the container to bring the straw into alignment with the orifice in the top end of the container. The straw is supported by a weighted member that responds to the manipulation of the container to move the straw. A float is attached to the straw to elevate the straw through the orifice when the straw is aligned with the orifice. Several alternative embodiments of the invention are disclosed.

0) US2008127705A – METHOD AND APPARATUS FOR MAKING TWO–PIECE BEVER...

18) Family number: 41861115 (US2008127705A) © PatBase

Title: METHOD AND APPARATUS FOR MAKING TWO–PIECE BEVERAGE CAN COMPONENTS

Priority: EP20070854860 20071130 US20060607468 20061130 WO2007US86048 20071130

Family:

Publication number	Publication date	Application number	Application date
DE602007029897 D1	20130613	DE200760029897T	20071130
EP2091676 A1	20090826	EP20070854860	20071130
EP2091676 B1	20130417	EP20070854860	20071130
ES2421628 T3	20130904	ES20070854860T	20071130
US2008127705 AA	20080605	US20060607468	20061130
US7797978 BB	20100921	US20060607468	20061130
WO08067522 A1	20080605	WO2007US86048	20071130

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** GILET PIERRE YVES ; KELLY SHAUN ; REXAM BEVERAGE CAN CO ; REXAM BEVERAGE CAN EUROP LTD ; REXAM BEVERAGE CAN EUROPE LTD ; SASSO JOSEPH A JR ; SASSO JOSEPH A

Assignee(s): REXAM BEVERAGE CAN EUROPE LIMITED ; REXAM BEVERAGE CAN EUROPE LTD LUTON ; REXAM BEVERAGE CAN CO CHICAGO ; REXAM BEVERAGE CAN COMPANY

Inventor(s):(std)**:** GILET PIERRE YVES ; KELLY SHAUN ; SASSO JOSEPH A ; SASSO JOSEPH A JR ; SASSO JR JOSEPH A

Inventor(s): SASSO JOSEPH A JR ROCKFORD

Agent(s): KILBURN AND STRODE LLP; HICKINSON KATIE LOUISE; CAWLEY AIMEE ELIZABETH; CARPINTERO MARIO; IP DEPARTMENT, SCHWARTZ COOPER CHARTERED; IP DEPARTMENT SCHWARTZ COOPER CHARTERED; UNGARETTI AND HARRIS LLP; KLOBUCHAR PETER M

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D11/10 B21D51/26 (Advanced/Invention); B21D11/00 B21D51/26 (Core/Invention)

CPC: Y10S72/715 B21D51/2692

European class: B21D51/26T

US class: 72/379.4 72/379.6 72/405.01 72/419 72/715 723/794

Classification Explorer

Cited documents: WO07020946 A1, US7108469 BB, US6945085 BA, US6802197 BB, US6463776 BA, US6349586 BA, US5626049 A, US5611454 A, US5572893 A, US5377518 A, US5301534 A, US5119657 A, US5095730 A, US4655677 A, US4567746 A, US4546873 A, US4454743 A, US4342404 A, US4213324 A, US4199073 A, US3990353 A, US3545631 A, US3029507 A, US2789344 A, US2350491 A, US2099449 A, US2088223 A, US2080399 A, US2005138984 AA, US1702278 A, US1492230 A, JP8257661 A2, JP2007045507 A2, JP2000015371 A2, EP1136154 A1,

Forward Citations: US9016101, US2016354831, US2010251798, EP2353745, DE102010000094, DE102010000094, AU2010235077,

Abstract:
Source: US2008127705A A method of forming two–piece beverage can components is described. The method requires providing a plurality of pre–punched metallic disks. A disk feeder transfers at least one of the plurality of pre–punched metallic disks to a first process station in a plurality of processing stations. The first disk is deformed

during a two−piece beverage can component manufacturing process is performed at the first station. The deformed disk is removed from the first station and transferred to each subsequent processing station in the plurality of processing stations. Further two−piece beverage can component manufacturing processes are performed in each subsequent processing station to produce a substantially finished two−piece beverage can component.

19) Family number: 28256000 (US2001019058A) © PatBase

Title: Cover mountable to beverage container and mounting method and apparatus thereof

Priority: DE20001018685 20000414 KR19990029106U 19991222 KR19990035332 19990825 KR19990051022 19991117 KR19990058534 19991217 KR20000002006 20000125 KR20000005570 20000229 KR20000005571 20000229 US20010853810 20010511 US20000534203 20000324 US20010853815 20010511 KR20000002006U 20000125 KR20000005570U 20000229 KR20000005571U 20000229 US20020062166 20020131 WO2000KR00304 20000404

Family:

Publication number	Publication date	Application number	Application date
AU200036819 A5	20010319	AU20000036819	20000404
DE10018685 A1	20010607	DE20001018685	20000414
DE10018685 C2	20030618	DE20001018685	20000414
DE10066012 C2	20030710	DE20001066012	20000414
DE10066014 C2	20030703	DE20001066014	20000414
JP2001072113 A2	20010321	JP20000090328	20000329
KR100353681 B1	20020919	KR19990058534	19991217
KR19990083877 A	19991206	KR19990035332	19990825
KR20000006983 A	20000207	KR19990051022	19991117
KR20000017810 A	20000406	KR19990058534	19991217
KR200183702 Y1	20000601	KR19990029106U	19991222
KR200195208 Y1	20000901	KR20000005570U	20000229
KR200195209 Y1	20000901	KR20000005571U	20000229
KR200202465 Y1	20001115	KR20000002006U	20000125
US2001019058 AA	20010906	US20010853815	20010511
US2001040163 AA	20011115	US20010853810	20010511
US2002070219 AA	20020613	US20020062166	20020131
US6386814 BB	20020514	US20010853810	20010511
US6390749 BB	20020521	US20010853815	20010511
WO0114218 A1	20010301	WO2000KR00304	20000404

Probable Assignee: KANGSAN TECHNOLOGIES LTD

Assignee(s):(std)**:** CONIC KOREA INC ; KANG SAN TECHNOLOGIES LTD ; KANG SAN TECHNOLOGY LTD ; KANGSAN TECHNOLOGIES LTD

Assignee(s): KANGSAN TECHNOLOGIES LTD SEOUL SOUL

Inventor(s):(std)**:** SONG JONG HOON ; SONG JONGHOON

Inventor(s): JONG HOON SONG ; SONG IK SEON

Agent(s): SUZUKI SATORU

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT KE KG KP KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

International class (IPC 8–9): B21D51/38 B65B7/28 B65D17/00 B65D17/28 B65D17/50 B65D41/62 B65D43/00 B65D51/00 B65D51/02 B65D51/24 B65D77/20 (Advanced/Invention); B21D51/38 B65B7/28 B65D17/00 B65D17/28 B65D17/50 B65D43/00 B65D51/24 (Advanced/Non–invention); B21D51/38 B65D17/00 B65D43/00 (Core/Invention)

International class (IPC 1–7): A47G19/22 B21D51/26 B21D51/38 B21D51/44 B65B61/18 B65B7/28 B65D17/00 B65D17/50 B65D43/00 B65D43/02 B65D51/02 B65D51/20 B65D51/22 B65D51/24 B65D77/20

CPC: B65D17/165 B65D51/007 B65D2517/0013 B65D2517/0025 B65D2517/004 B65D2517/0041 B65D2517/0098

European class: B65D17/16B2 B65D51/00F L65D517/00Y2B L65D517/00Y3B L65D517/00Y5D L65D517/00Y5D1 L65D517/00Y9

US class: 220/253 220/253S 220/254.4 220/254.400P 220/257.2 220/257.200S 220/258 220/258.2 220/258.200P 220/258.200S 220/258.5 220/258.500S 220/716 220/716S 220/730 220/730S 413/12 413/13 413/13S 413/14 413/2 413/45 413/47 413/47S 413/52 413/52S 413/53 413/54 413/66 413/78 53/133.2 53/133.200S 53/139.5 53/410 53/412 53/412S

Classification Explorer

Cited documents: US5893489 A, US5720412 A, US5707196 A, US5692616 A, US5421472 A, US5269432 A, US5147057 A, US5142769 A, US5131554 A, US5119311 A, US5102002 A, US5071019 A, US4938379 A, US4927048 A, US4880136 A, US4852763 A, US4717039 A, US4681238 A, US4213537 A, US4205759 A, US4166424 A, US4136629 A, US4092940 A, US4026226 A, GB547229 A,

Forward Citations: WO17027727, WO15152592, WO15109349, WO13020706, WO12010258, WO12007496, WO09001984, WO07053277, WO02085628, USD787952, USD672235, USD658980, USD654791, USD653538, USD632562, USD578392, USD500343, US8998028, US8881940, US8875926, US8708188, US8622238, US8579148, US8534490, US8201706, US7914640, US7475787, US7025224, US2014251997, US2013240535, US2012312815, US2011100854, US2010065573, US2009057314, US2009026201, US2008230544, US2008197618, US2007138187, US2007095847, US2006281965, US2006163251, US2006102629, US2005211708, US2004065662, NL2004639, KR200454700, JP2008543692, GB2441602, FR2853124, EP2557050, EP2502838, EP2409925, CN103287703, BE1018936,

Abstract:
Source: US2001019058A Disclosed is a cover mountable to a beverage container and mounting method and apparatus thereof. The container cover detachably mountable to an upper surface of a beverage container comprises a body which is formed to have substantially a disc−shaped configuration. The body is partly cut away from an edge toward a center thereof thereby to define a beverage discharging opening which has a predetermined width and a predetermined contour. The beverage discharging opening is capable of being selectively communicated with a discharging hole of the beverage container as the body is rotated. An inner end of the beverage discharging opening is delimited by a rotation guiding part which has a predetermined curvature to guide rotation of the body. The body has a straw insertion hole which is defined therein at a predetermined location to have a predetermined diameter in a manner such that a straw can be inserted therethrough. The body further has an advertisement surface which has a predetermined area in a manner such that an advertising design, letters, and so forth can be printed or an attachment can be affixed thereon.

0) US2004238380A – PACKAGING FOR DISPOSABLE SOFT CONTACT LENSES

20) Family number: 15678965 (US2004238380A) © PatBase

Title: PACKAGING FOR DISPOSABLE SOFT CONTACT LENSES

Priority:

AU20010007086	20010817	AU2001PR07086	20010817	AU20020322175	20020817
AU20050217221	20050216	AU20110200587	20110211	AU20090203013	20090724
AU20130200634	20130206	AU20130200636	20130206	CA20142556761	20140110
CA20052836759	20050216	CA20052556761	20050216	AU20160200865	20160210
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US20060429150	20060505	EP20020753929	20020817	US20060404200	20060413
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US20100904106	20101013	US20070650231	20070105	WO2005IB00388	20050216
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US20060833230P	20060724	WO2002AU01105	20020817	US20060832324P	20060721
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Family:

Publication number	Publication date	Application number	Application date
AU2001007086 A0	20010906	AU2001PR07086	20010817
AU2002322175 AA	20030303	AU20020322175	20020817
AU2005217221 AA	20050909	AU20050217221	20050216
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Probable Assignee: MENICON SINGAPORE PTE LTD

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Assignee(s): CLEARLAB INT ; NEWMAN STEPHEN ; MENICON SINGAPORE PTE LTD8 INTERNATIONAL BUSINESS PARK609925SINGAPORESG ; MENICON CO LTD3−21−19, AOI, NAKA−KU460−0006NAGOYAJP ; CLEARLAB INTERNATIONAL PTE LTD ; CLEARLAB INT PTELTD ; MENICON CO ; MANICON CO

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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

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A61F9/00 B65D75/30 (Advanced/Non−invention);
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A45C A47F A61F B29C B65B B65D G02C (Subclass/Invention);
A45C B65D G02C (Subclass/Non−invention)

International class (IPC 1−7): A45C11/00 A45C11/04 A47F1/00 A61F9/00 B65B11/48 B65D73/00 B65D75/28 B65D75/30 B65D75/32 B65D75/36 B65D75/52 B65D75/58 B65D81/22 B65D83/04 B65D85/38 G02C11/00 G02C13/00 G02C7/04 G11B7/135

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Abstract:
Source: US2004238380A The present invention provides a contact lens package in which the overall internal depth of the package is less than the natural sagittal depth of the contact lens. Different single–use contact lens package shapes and configurations may be used. In some embodiments, a spring disc is included in the packages to help present the contact lens to the user when the package is opened. The contact lens packages may be adhered or clipped to a card or other carrier sheet, and may be housed in a number of different secondary packages.

0) US2002049196A – GROWTH–HORMONE SECRETAGOGUES

21) Family number: 30091415 (US2002049196A) © PatBase

Title: GROWTH–HORMONE SECRETAGOGUES

Priority:

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YU70296 A	19991122	YU19960000702	19961226	
ZA9610858 A	19980623	ZA19960010858	19961223	

Probable Assignee: RAQUALIA PHARMA INC

Assignee(s):(std)**:** CARPINO PHILIP A ; JARDINE DASILVA PAUL A ; PFIZER ; RAGAN JOHN A ; PFIZER INC ; LEFKER BRUCE A ; PFIZER LTD

Assignee(s): PFIZER INC SOC ANONIMA ORGANIZADA EN CONFORMIDAD A LAS LEYES DEL ESTADO DE DELAWARE ; PFIZER INC NEW YORK NEW YORK ; PFAJZER INK. ; RAQUALIA PHARMA INC ; JARDINE PAUL A DASILVA ; DASILVA JARDINE PAUL A

Inventor(s):(std)**:** CARPINO P A ; CARPINO PHILIP A ; CARPINO PHILIP ALBERT ; CARPINO PHILLIPA ; CARPINO PHILLIPS A ; DA SILVA JARDINE PAUL A ; DA SILVA JARDINE PAUL ANDREW ; DASILVA JARDINE PAUL A ; JARDINE D P A ; JARDINE DASILVA P ; JARDINE DASILVA PAUL ; JARDINE DASILVA PAUL A ; BRUCE A LEFKER ; JARDINE PAUL A D ; JARDINE PAUL A DASILVA ; KAPIINO PHILIPP A ; LAFKER BRUCE A ; LEFKER B A ; LEFKER BRUCE ; LEFKER BRUCE A ; LEFKER BRUCE ALLEN ; JOHN A RAGAN ; PAUL A DASILVA JARDINE ; PHILIP CARPINO A ; PHILLIPA CAPRINO ; RAGAN JOHN ; RAGAN JOHN A ; REGAN JOHN A ; RAGAN JOHN ANTHONY ; PHILIP A CARPINO

Inventor(s): PHILIP ALBERT CARPINO ; JOHN ANTHONY RAGAN ; PHILLIPS A CARPINO ; POL A. DASIL'VA DZHARDIN ; PAUL ANDREW DASILVA JARDINE ; JOHN ALLEN RAGAN ; P A CARPINO ; PA CARPINO ; PAUL A DASILVA ; JARDINE PAUL ADASILVA ; BRUCE ALLEN LEFKER ; CAPRINO PHILLIPA ; JARDINE PAUL A ; DASILVA PAUL A JARDINE ; DPA JARDINE ; DZHON A. REHGEHN ; FILIP A. KARPINO ; D P A JARDINE ; ALLEN LEFKER BRUCE ; B A LEFKER ; BA LEFKER ; BRJUS A. LEFKER

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; SMART AND BIGGAR; ALESSANDRI; CARLOS REINALDO OLARTE GARCIA; SANFORD TCOLB AND CO; LUZZATTO AND LUZZATTO

Designated states: AT AU BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK ES FI FR GA GB GN GR HU IE IL IS IT JP KR KZ LI LK LU LV MC ML MR MX NE NL NO NZ PL PT RO RU SE SG SI SK SN TD TG TR UA US UZ VN

International class (IPC 8–9): A61K31/395 A61K31/415 A61K31/435 A61K31/495 A61K31/565 A61K31/66 A61K31/675 A61K38/00 A61K38/04 A61K38/05 A61K38/25 A61K38/30 A61P19/00 A61P19/10 A61P21/00 A61P43/00 A61P5/02 A61P5/06 A61P9/00 A61P9/02 C07C C07D221/00 C07D231/00 C07D231/54 C07D471/04 C07D487/02 C07D487/04 C07D519/00 C07D521/00 C07F9/6561 C07K5/02 C07K5/06 C07K5/062 (Advanced/Invention);
A61K31/415 A61K31/565 A61K31/66 A61K38/00 A61K38/04 A61P43/00 A61P9/00 C07K5/06 (Advanced/Non–invention);
A61K31/00 A61K31/415 A61K31/565 A61K31/66 A61K38/00 A61K38/04 A61P19/00 A61P43/00 A61P5/00 A61P9/00 C07D231/00 C07D471/00 C07D487/00 C07D521/00 C07K5/00 (Core/Invention);
A61K31/00 A61K38/00 C07D521/00 (Core/Non–invention);
C07K (Subclass/Invention)

International class (IPC 1–7): A01N43/42 A61K31/395 A61K31/415 A61K31/435 A61K31/4375 A61K31/495 A61K31/565 A61K31/66 A61K31/675 A61K38/00 A61K38/04 A61K38/05 A61K38/25 A61K38/30 A61P19/00 A61P19/10 A61P21/00 A61P5/06 C07C C07D221/00 C07D231/54 C07D237/26 C07D471/02 C07D471/04 C07D487/02 C07D487/04 C07D519/00 C07D521/00 C07F9/6561 C07K05/06 C07K5/00 C07K5/05 C07K5/05 C07K5/06 C07K5/062 C07M7/00

CPC: C07K5/06034 A61K38/00 C07D471/04 C07K5/0202

European class: C07D471/04 C07K5/02A C07K5/06A1B K61K38/00

US class: 514/1.1 514/1.3 514/11.2 514/11.3 514/11.4 514/11.9 514/15.4 514/16.4 514/16.7 514/16.9 514/17.5 514/18.6 514/19 514/21.9 514/215 514/248 514/248S 514/303 514/303S 514/405 514/8.5 514/8.6 514/9.4 540/476 540/478 540/578 540/578S 544/236 544/236S 546/119 546/12 546/120 546/120S 548/360.5

Classification Explorer

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Forward Citations: WO9965488, WO9965486, WO9858949, WO9858948, WO9858947, WO17075535, WO16067638, WO16030534, WO16021191, WO14197720, WO14192294, WO14151206, WO14151200, WO14065341, WO14022528, WO13175805, WO13138352, WO13059222, WO12116145, WO11106273, WO11105611, WO11101804, WO10051236, WO10051206, WO10047982, WO10013595, WO09154132, WO09119726, WO08120653, WO08038692, WO08028688, WO07106385, WO07098716, WO07055418, WO07049798, WO07041052, WO07029847, WO07024004, WO07018248, WO06129826, WO05097174, WO05097174, WO05028438, WO05027913, WO04108120, WO04002986, WO03087070, WO03087070,

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Abstract:
Source: US2002049196A This invention is directed to compounds of the formula and the pharmaceutically−acceptable salts thereof, where the substituents are as defined in the Specification, which are growth hormone secretogogues and which increase the level of endogenous growth hormone. The compounds of this invention are useful for the treatment and prevention of osteoporosis, congestive heart failure, frailty associated with aging, obesity; accelerating bone fracture repair, attenuating protein catabolic response after a major operation, reducing cachexia and protein loss due to chronic illness, accelerating wound healing, or accelerating the recovery of burn patients or patients having undergone major surgery; improving muscle strength, mobility, maintenance of skin thickness, metabolic homeostasis or renal homeostasis. The compounds of the present invention are also useful in treating osteoporosis when used in combination with: a bisphosphonate compound such as alendronate; estrogen, premarin, and optionally progesterone; an estrogen agonist or antagonist; or calcitonin, and pharmaceutical compositions useful therefor. Further, the present invention is directed to pharmaceutical compositions useful for increasing the endogenous production or release of growth hormone in a human or other animal which comprises an effective amount of a compound of the present invention and a growth hormone secretagogue selected from GHRP−6, Hexarelin, GHRP−1, growth hormone releasing factor (GRF), IGF−1, IGF−2 or B−HT920. The invention is also directed to intermediates useful in the preparation of compounds of formula I.

0) US2004035863A – MULTI–PURPOSE FOOD–SERVING APPARATUS

22) Family number: 30315390 (US2004035863A) © PatBase

Title: MULTI–PURPOSE FOOD–SERVING APPARATUS

Priority: US20020223741 20020820

Family:

Publication number	Publication date	Application number	Application date
US2004035863 AA	20040226	US20020223741	20020820
US7102111 BB	20060905	US20020223741	20020820

Probable Assignee: GOODROW MICHAEL

Assignee(s):(std)**:** GOODROW MICHAEL ; METCALF DARRELL J

Inventor(s):(std)**:** GOODROW MICHAEL ; METCALF DARRELL J

International class (IPC 8–9)**:** A47G21/00 B65D81/36 H05B6/80 (Advanced/Invention); B65D85/36 (Advanced/Non–invention); A47G21/00 B65D81/00 (Core/Invention); B65D85/30 (Core/Non–invention)

International class (IPC 1–7)**:** H05B6/80

CPC: A47G21/001 B65D81/36 B65D2585/366

European class: A47G21/00B B65D81/36 L65D585/36Y1

US class: 219/725 219/734 426/112

Classification Explorer

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Abstract:
Source: US2004035863A A folds–as–you–eat multi–purpose food–serving apparatus ('MPFSA') that is supportable from one end by one hand during eating, and has optional exhibiting means for providing multi–minute close–proximity exposures promoting observer–discernible content and/or user–discernible content, and optionally providing recreational, or display, functionality. The MPFSA is comprised of one or more materials having a pliability which accommodates the bending and unbending of the apparatus a plurality of times in a manner that will not significantly alter the presentation of served food. The MPFSA is also comprised of material(s) having sufficient rigidity to support one or more items of food, having a food–supporting surface which is stiffened by at least one adjacent food–retaining portion which extends upward from an edge thereof, or can be so positioned by a user, to increase the rigidity of, and facilitate the retention of served food on, the apparatus. The food–supporting surface of the apparatus is predisposed to be selectively bent and unbent, by a user, adjacent to an end of a reduced cross–section of at least one food–retaining portion. The food retaining portion(s) has at least one reduced cross–section predisposed to be bent and unbent by a user adjacent to the food–supporting surface reduced cross–section(s). Upper surfaces of the MPFSA provide close proximity viewing as a user is taking, or about to take, a bite out of the served food. MPFSA surfaces are easily viewed by observers proximate to the user, when the user is holding the apparatus or when it is in a resting position.

23) Family number: 43327678 (ZA200404812A) © PatBase

Title: FUSED HETEROCYCLIC SUCCINIMIDE COMPOUNDS AND ANALOGS THEREOF, MODULATORS OF NUCLEAR HORMONE RECEPTOR FUNCTION.

Priority: US20010025116 20011219 WO2002US40598 20021218

Family:

Publication number	Publication date	Application number	Application date
AR037950 AA	20041222	AR2002P105038	20021219
AT411319 E	20081015	AT20020797421T	20021218
AU2002361785 AA	20030902	AU20020361785	20021218
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TWI263640 B	20061011	TW20020136163	20021213
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UY27595 A1	20030731	UY20020027595	20021219
WO03062241 A1	20030731	WO2002US40598	20021218
WO03062241 C1	20041021	WO2002US40598	20021218
YU53604 A	20060817	YU20040000536	20021218
ZA200404812 A	20050826	ZA20040004812	20040617

Probable Assignee: BRISTOL–MYERS SQUIBB COMPANY

Assignee(s):[(std)]**:** BALOG JAMES AARON ; BRISTOL MAERS SKVIBB KOMPANI ; BRISTOL MYERS SQUIBB CO ; BRISTOL MYERS SQUIBB PHARMA CO ; BRISTOLS MYERS SQUIBB COMPANY ; SQUIBB BRISTOL MYERS CO ; ORATION ; SPERGEL STEVEN H ; MISRA RAJ ; ROBERGE JACQUES ; RAMPULLA RICHARD A ; PICKERING DARCIA A ; MITT TOOMAS ; SALVATI MARK E ; PATEL RAMESH N ; XIAO HAI YUN ; PICKERING DACIA A ; BRISTOLS MYERS SQUIBB CO ; GIESE SOREN ; LI WENYING ; HANSON RONALD L ; CORTE JAMES R ; FURA ABERRA

Assignee(s): BRISTOL−MYERS SQUIBB COMPANY ; Bristol Myers Squibb Company a Delaware USA Corp ; BRISTOL MYERS SQUIBB COMPANY PRINCETON ; BRISTOL MYERS SQUIBB CO A DELAWARE USA CORP ; BRISTOL MYERS SQUIBB CO PRINCETON ; BRISTOL MYERS SQUIBB COMPANY ; BRISTOL MYERS SQUIBB PHARMA COMPANY

Inventor(s):[(std)]**:** AARON BALOG JAMES ; BALOG JAMES ; BALOG JAMES AARON ; BEHLOG DZHEJMS AARON ; CORTE JACQUES R ; CORTE JAMES ; CORTE JAMES R ; HANSON L RONALD ; HANSON RONALD ; HANSON RONALD L ; FURA ABERRA ; GIESE SOEREN ; GIESE SOREN ; GIZ SOREN ; KHEHNSON RONALD L ; KORT DZHEJMS R ; KSIAO KHAJ JUN ; LI VENJING ; LI WENYING ; MISRA RADZH ; MISRA RAJ ; MISRA RAJ N ; MISRA RAJ NARAIN ; MISRA RICHARD A RAJ ; MITT TOOMAS ; MITT TUMAS ; PATEL N RAMESH ; PATEL RAMESH ; PATEL RAMESH N ; PICKERING DACIA ; PICKERING DACIA A ; PICKERING DARCIA A ; PEHTEL REHMESH N ; PIKERING DARSIJA A ; RAJ N MISRA ; RAMPULLA RICHARD ; RAMPULLA RICHARD A ; REHMPULLA RICHARD A ; ROBERGE JACQUES ; ROBERGE JACQUES Y ; ROBERZH ZHAK ; SALVATI E MARK ; SALVATI MARK ; SALVATI MARK E ; SALVATI MARK ERNEST ; SEHLVETI MARK E ; SPERGEL STEVEN ; SPERGEL STEVEN H ; SPERGEL STIVEN KH ; STEVEN H SPERGEL ; XIAO HAI YUN

Inventor(s): XIAO, HAI−YUN ; TOOMAS MITI ; TOOMAS MITT ; WENYING LI ; SOEREN GIESE ; SOREN GIESE ; RONALD L HANSON ; RICHARD A RAJ MISRA ; RICHARD A RAMPULLA ; RAMESH N PATEL ; RAMPULIA Y ; RAJ MISRA ; MITTI TOOMAS ; MARK E SALVATI ; KSIAO KHAJ−JUN ; HAI YUN ; HAI YUN XIAO ; FURA ABERRA AND ; JACQUES R CORTE ; JACQUES ROBERGE ; JACQUES Y ROBERGE ; JAMES AARON BALOG ; JAMES R CORTE ; DACIA A PICKERING ; DARCIA A PICKERING ; ABERRA FURA

Agent(s): PHILLIPS ORMONDE FITZPATRICK; GOWLING LAFLEUR HENDERSON LLP; SARGENT; RAMIRO CASTRO DUQUE; VOSSIUS AND PARTNER; TAMURA YASUO; SHINAGAWA HISATOSHI

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8−9): A61K31/381 A61K31/395 A61K31/40 A61K31/407 A61K31/415 A61K31/4155 A61K31/416 A61K31/417 A61K31/4178 A61K31/4184 A61K31/4192 A61K31/4196 A61K31/422 A61K31/423 A61K31/424 A61K31/4245 A61K31/427 A61K31/428 A61K31/433 A61K31/437 A61K31/439 A61K31/443 A61K31/4439 A61K31/454 A61K31/4709 A61K31/472 A61K31/4725 A61K31/498 A61K31/506 A61K31/52 A61K31/537 A61K31/5377 A61K31/7052 A61P1/14 A61P13/08 A61P15/00 A61P15/02 A61P15/04 A61P15/08 A61P15/18 A61P17/08 A61P17/10 A61P17/14 A61P19/10 A61P21/02 A61P25/18 A61P25/28 A61P25/30 A61P29/00 A61P3/06 A61P3/10 A61P35/00 A61P37/02 A61P5/26 A61P5/28 A61P5/32 A61P5/46 A61P7/00 A61P9/04 C07D209/00 C07D307/00 C07D335/00 C07D471/08 C07D471/18 C07D487/18 C07D491/00 C07D491/08 C07D491/18 C07D491/22 C07D495/04 C07D495/08 C07D495/18 C07D519/00 C07H17/00 (Advanced/Invention); C07D495/08 C07D495/18 (Advanced/Non−invention); A61K31/40 A61K31/407 A61K31/4155 A61K31/416 A61K31/4164 A61K31/4192 A61K31/4196 A61K31/422 A61K31/423 A61K31/4245 A61K31/427 A61K31/428 A61K31/433 A61K31/4353 A61K31/439 A61K31/4427 A61K31/4523 A61K31/4709 A61K31/472 A61K31/498 A61K31/506 A61K31/519 A61K31/5375 A61K31/7042 A61P1/00 A61P13/00 A61P15/00 A61P17/00 A61P19/00 A61P21/00 A61P25/00 A61P29/00 A61P3/00 A61P35/00 A61P37/00 A61P5/00 A61P7/00 A61P9/00 C07D471/00 C07D487/00 C07D491/00 C07D495/00 C07D519/00 C07H17/00 (Core/Invention)

International class (IPC 1−7): A61K31/194 A61K31/343 A61K31/381 A61K31/382 A61K31/395 A61K31/40 A61K31/407 A61K31/4155 A61K31/416 A61K31/4178 A61K31/4184 A61K31/4192 A61K31/4196 A61K31/422 A61K31/423 A61K31/4245 A61K31/427 A61K31/428 A61K31/433 A61K31/437 A61K31/439 A61K31/4439 A61K31/454 A61K31/4709 A61K31/4725 A61K31/498 A61K31/506 A61K31/52 A61K31/5377 A61K31/7052 A61P1/14 A61P13/08 A61P15/00 A61P15/02 A61P15/04 A61P15/08 A61P15/18 A61P17/08 A61P17/10 A61P17/14 A61P19/10 A61P21/02 A61P25/18 A61P25/28 A61P25/30 A61P29/00 A61P3/06 A61P3/10 A61P35/00 A61P37/00 A61P37/02 A61P5/26 A61P5/28 A61P5/32 A61P5/46 A61P7/00 A61P9/04 C07D471/08 C07D471/18 C07D487/18 C07D491/00

C07D491/048 C07D491/08 C07D491/18 C07D491/22 C07D495/04 C07D495/18 C07D513/08 C07D519/00 C07H17/00

CPC: C07D491/18 C07D491/22 C07D519/00

European class: C07D491/18 C07D491/22 C07D519/00

Classification Explorer

Cited documents: WO9967253, WO9967252, WO9965913, WO9954330, WO9954319, WO9954318, WO9943653, WO9935246, WO9928324, WO9927890, WO9924416, WO9907692, WO9903848, WO9902514, WO9902224, WO9901124, WO9900353, WO9854966, WO9838192, WO9829495, WO9827423, WO9825929, WO9822461, WO9749709, WO9730992, WO9721993, WO9719086, WO9619458, WO9304081, WO9106297 A1, WO8907111, WO8907110, WO0224702 A1, WO0200617 A2, WO0001389, WO0000485, US88583101, US88582701, US6448284 BA, US6384050 BA, US6184231, US6090837 A, US6043265, US6040321, US6011029, US5961925, US5817679, US5776983, US5770615, US5696133, US5696130, US5696127, US5693647, US5693646, US5688810, US5688808, US5612359, US5541204, US5523277, US5491134, US5488064, US5179080, US4892943 A, US4670536, US4476184, US4411890, US4036979, US3995099, US3821232, US3320270 A, US3261845 A, US3239345, US3215597 A, US28443801, US09519079, JP63170383, JP63170383, JP62053964, JP62053963, JP53086035, JP51088631, JP49124225, JP09194458, JP07144477, JP04290868, JP04149173, JP04134063, JP04134062, JP01061457, GB98284425, FR2031538, EP355435, DE4138042, DD101271, AU2001288213 BB, AU2001288213 B2, AU2001269943 BB, AU2001269943 B2,

Forward Citations: WO14179564, WO14111871, WO11029782, WO11007819, WO10126167, WO08157291, WO08157291, WO08042571, WO05049621, WO05037839, US9434754, US8541599, US8153725, US8013004, US7718810, US7700773, US7655689, US7655688, US7642273, US7625921, US7605264, US7576119, US7569689, US7544808, US7517904, US7470797, US7411071, US7361654, US7342034, US7326728, US7317024, US7291637, US7273881, US7253283, JP4880583, JP2009507843, JP2007529495, FR2860793, EP2708541, EP2426117, CN102459221,

Abstract:
Source: ZA200404812A Fused cyclic compounds method of using such compounds in the treatment of nuclear hormone receptor–associated conditions such as cancer and immune disorders, and pharmaceutical compositions containing such compounds.

0) US2005199617A – MICROWAVABLE METALLIC CONTAINER

24) Family number: 47827838 (US2005199617A) © PatBase

Title: MICROWAVABLE METALLIC CONTAINER

Priority: US20040797749 20040309 US20050064224 20050222 US20070621911 20070110
US20070621907 20070110 US20070621908 20070110 US20070621912 20070110
WO2005US02283 20050124 WO2006US06602 20060222 US20070743578 20070502

Family:

Publication number	Publication date	Application number	Application date
AU2005227549 AA	20051013	AU20050227549	20050124
AU2005227549 BB	20110512	AU20050227549	20050124
AU2006216587 AA	20060831	AU20060216587	20060222
AU2006216587 BB	20100311	AU20060216587	20060222
BRPI0508139 A	20071218	BR2005PI08139	20050124
BRPI0608048 A2	20091103	BR2006PI08048	20060222
CA2598697 AA	20070822	CA20062598697	20060222
CA2598697 C	20130108	CA20062598697	20060222
CA2600961 AA	20070829	CA20052600961	20050124
CA2600961 C	20120117	CA20052600961	20050124
EP1731001 A1	20061213	EP20050711967	20050124
EP1731001 A4	20081119	EP20050711967	20050124
EP1859652 A2	20071128	EP20060736031	20060222
EP1859652 A4	20091021	EP20060736031	20060222
IL185393 A0	20080209	IL20060185393	20060222
JP2007528262 T2	20071011	JP20070502802T	20050124
JP2008531405 T2	20080814	JP20070556433T	20060222
MX2007010274 A1	20071107	MX20070010274	20060222
MXPA06010291 A1	20070119	MX2006PA10291	20050124
US2005199617 AA	20050915	US20040797749	20040309
US2005199619 AA	20050915	US20050064224	20050222
US2007102425 AA	20070510	US20070621911	20070110
US2007108196 AA	20070517	US20070621907	20070110
US2007108197 AA	20070517	US20070621908	20070110
US2007108198 AA	20070517	US20070621912	20070110
US2007284368 AA	20071213	US20070743578	20070502
US7112771 BB	20060926	US20040797749	20040309
US7378625 BB	20080527	US20050064224	20050222
US7812292 BB	20101012	US20070621907	20070110
US8080770 BB	20111220	US20070743578	20070502
WO05096674 A1	20051013	WO2005US02283	20050124
WO06091821 A2	20060831	WO2006US06602	20060222
WO06091821 A3	20070301	WO2006US06602	20060222

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP ; HIRSCH VINCENT ; RICHARDSON MICHAEL ; KAANTA JASON

Assignee(s): HIRSCH VINCENT A ; RICHARDSON MICHAEL D

Inventor(s):(std)**:** HIRSCH VINCENT ; HIRSCH VINCENT A ; KAANTA JASON ; RICHARDSON MICHAEL ; RICHARDSON MICHAEL D

Inventor(s): VINCENT HIRSCH ; MICHAEL RICHARDSON ; JASON KAANTA

Agent(s):

PHILLIPS ORMONDE FITZPATRICK; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; PIZZEYS; GOODWIN MCKAY; PARLEE MCLAWS LLP; SHERIDAN ROSS PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A23C9/14 A23L3/00 A47J27/00 A47J36/02 B65B55/00 B65D17/00 B65D17/34 B65D25/20 B65D41/00 B65D51/20 B65D51/26 B65D51/28 B65D6/28 B65D8/04 B65D8/20 B65D81/20 B65D81/26 B65D81/34 B65D81/38 B65D85/00 H05B H05B6/60 H05B6/68 H05B6/76 H05B6/80 (Advanced/Invention); B65D8/18 (Advanced/Non–invention); A23L3/00 A47J27/00 A47J36/02 B65B55/00 B65D17/00 B65D17/28 B65D41/00 B65D51/18 B65D51/24 B65D81/34 B65D85/00 H05B6/76 H05B6/80 (Core/Invention); H05B (Subclass/Invention)

International class (IPC 1–7): A23L3/00 B65B55/00 B65D17/34 B65D51/20 B65D51/26 B65D51/28 B65D85/00 H05B6/76 H05B6/80

CPC: B65D15/14 B65D17/163 B65D43/0212 B65D51/20 B65D81/3453 B65D2205/02 B65D2205/025 B65D2517/0016 B65D2543/00092 B65D2543/00296 B65D2543/0074 H05B6/6494 B65D2251/0018 B65D2251/0071

European class: B65D15/14 B65D17/16B1 B65D43/02S3E B65D51/20 B65D81/34M1 H05B6/64T4C L65D205/02 L65D205/02A L65D251/00Y2F L65D251/00Y6A L65D517/00Y2D L65D543/00Y1F2C L65D543/00Y1M6 L65D543/00Y8S3B4

US class: 219/725 219/728 219/729 219/730 219/734 219/762 219/762S 220/212.5 220/258.2 220/612 229/5.6

Classification Explorer

Cited documents: WO9611142 A2, WO9322219 A1, WO9212904 A1, WO9203355 A1, WO04033324 A1, WO0041935 A2, USRE32739 E, USD510024 S1, USD345081 S1, US7378625 BB, US7112771 BB, US6508375 BA, US6221420 BA, US6213328 BA, US6165115 A, US6147337 A, US5961872 A, US5900264 A, US5725120 A, US5355991 A, US5246134 A, US5240131 A, US5230914 A, US5217307 A, US5108387 A, US5022551 A, US4997691 A, US4988013 A, US4940158 A, US4875597 A, US4866234 A, US4828135 A, US4814568 A, US4689458 A, US4656325 A, US4641005 A, US4637543 A, US4560850 A, US4558198 A, US4513876 A, US4438850 A, US4416907 A, US438850 A, US4388335 A, US4351997 A, US4228916 A, US4227624 A, US4190757 A, US4081648 A, US4081646 A, US4048282 A, US4046282 A, US3985261 A, US3952912 A, US3941967 A, US3854023 A, US3737092 A, US3709398 A, US3547661 A, US3547305 A, US3379358 A, US3219460 A, US3079031 A, US2714070 A, US2007284368 AA, US2007108198 AA, US2007108197 AA, US2007108196 AA, US2007102425 AA, US2005199619 AA, US2005199617 AA, US2003038131 AA, NZ333393 A, JP8085546 A2, JP5305935 A2, JP5229558 A2, JP2152647 A2, JP2001247157 A2, JP1131634 A2, GB2134495 A1, FR2666073 A1, EP1144258 A1, EP0875370 A2, EP0487166 A1, EP0344839 A1, DE4124208 A1, DE4102053 C1, CN1396098 A, CN1395899 A, CN1085180 A, CA2113812 AA,

Forward Citations: WO10054226, WO10054226, USRE45837, USD743636, USD729989, USD711677, USD709317, USD677585, USD677584, USD672663, USD663622, USD663210, USD661204, USD661203, USD658078, USD656042, USD653563, USD653562, USD653126, USD653125, USD653124, USD653123, USD652742, USD652741, USD652740, USD651527, USD651526, USD649887, USD641261, USD638311, USD632190, USD632189, USD632188, USD632187, USD631759, USD626015, USD624438, USD621724, USD620377, USD615877, USD614970, USD614969, USD614049, USD612732, USD607727, USD607330, USD607329, USD606406, USD606405, USD606404, USD606403, USD606402, USD599678, USD599677, USD596958, USD596957, USD596956, USD596955, USD596505, USD596504, USD596503, USD596502, USD596501, USD596500, USD588021, USD588020, USD588019, USD588018, USD588017, USD588016, US9216840, US9162786, US8772685, US8748786, US8701887, US8602244, US8602242, US8528765, US8517176, US8416145, US8231024, US8141741, US8080770, US8066137, US8011524, US7918360, US7861881, US7812292, US2015202720, US2014263294, US2014231419, US2013318871, US2013015094, US2011120993, US2010177004, US2010163553, US2010025281, US2010025279, US2009218349, US2009096878, US2008156794, US2007284368, US2007181577, US2007108196, US2007062947, US2006266751, US2006091140,

Abstract:
Source: US2005199617A The present invention relates to metallic containers for food and beverage products, and more specifically, a substantially metallic container with a microwavable transparent portion and a selectively removable metallic lid, wherein the container can be used in a conventional microwave oven.

0) US2013004625A – CONTAINER FOR FOOD ITEMS

25) Family number: 52400577 (US2013004625A) © PatBase

Title: CONTAINER FOR FOOD ITEMS

Priority: CA20122776018 20120504 CA20142776018 20141126 US20120464469 20120504 US20110482376P 20110504

Family:

Publication number	Publication date	Application number	Application date
CA2776018 AA	20121104	CA20122776018	20120504
CA2776018 C	20150120	CA20122776018	20120504
CA2870083 AA	20121104	CA20122870083	20120504
US2013004625 AA	20130103	US20120464469	20120504
US9592951 BB	20170314	US20120464469	20120504

Probable Assignee: GG FOODS ACQUISITION CORP

Assignee(s):(std)**:** BRUMMER DOUG ; GIVE AND GO PREPARED FOODS CORP ; PARIKH SAMIR R

Assignee(s): GIVE AND GO PREPARED FOODS CORP6650 FINCH AVENUE WESTTORONTOO1M9W 5Y6CA ; PARIKH SAMIR R93 FANDAGO DRIVEBRAMPTONO1L6X 0P4CA ; PENFUND PARTNERS INC COLLATERAL AGENT AS ; BRUMMER DOUG6650 FINCH AVENUE WESTTORONTOO1M9W 5Y6CA ; DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; GG FOODS ACQUISITION CORP

Inventor(s):(std)**:** BRUMMER DOUG ; PARIKH SAMIR R

Inventor(s): PARIKH SAMIR R93 FANDAGO DRIVEBRAMPTONO1L6X 0P4CA ; BRUMMER DOUG6650 FINCH AVENUE WESTTORONTOO1M9W 5Y6CA

Agent(s): BERESKIN AND PARR LLP SENCRL SRL

International class (IPC 8–9): B65B25/00 B65B5/00 B65B5/06 B65B5/08 B65B63/08 B65B7/26 B65D1/36 B65D25/00 B65D43/16 B65D43/22 B65D81/00 B65D81/05 B65D85/00 B65D85/36 B65D85/60 (Advanced/Invention)

CPC: B65D85/36 B65D81/05 B65D1/36 B65D43/162 B65D85/60 B65D2543/00194 B65D2543/00203 B65D2543/00296 B65D2543/00361 B65D2543/00509 B65D2543/00537 B65D2543/00555 B65D2543/0062 B65D2543/00694 B65D2543/00731 B65D2543/00805 B65D2543/00842

US class: 220/507 220/834 426/119 53/440 53/448 53/467

Classification Explorer

Cited documents: USD592076 S1, USD514452 S1, US8895091 BB, US8727121 BB, US6231906 BA, US6176375 BA, US6176375 B1, US6033699 A, US5860549 A, US5858428 A, US5632924 A, US4193531 A, US4002773 A, US3989154 A, US3865953 A, US3845875 A, US3799386 A, US3645436 A, US2600130 A, US2100516 A, US2013199959 AA, US2010308039 AA, US2010147730 AA, US2010059580 AA, US2010018969 AA, US2009242569 AA, US2009223966 AA, US2005284307 AA, US2005029258 AA, US2004251162 AA, US1607024 A, US1336776 A,

Forward Citations: WO15164720, USD779934, USD771503, USD761127, US9650196, US9469458, US2015196037, US2013313253, JP2015037954,

Abstract:
Source: US2013004625A A combination of a container and a plurality of food items nested within the container may include base and a first cavity in the base. A first food item may be nested in the first cavity. The first food item may include a decorated section. The first food item may include a disposable wrapper having an exposed upper wrapper edge. The container may include a lid moveable between a closed position and an open position. A first retainer may be on the lid. When the lid is in the closed position the first retainer may overlie a first portion of the upper wrapper edge. When the container is inverted with the lid in the closed position relative axial movement between the first food item and the first cavity may be limited by contact between the first retainer and the upper wrapper edge.

0) US2004040443A – FOOD EMBOSSING STAMPER DEVICE

26) Family number: 30347940 (US2004040443A) © PatBase

Title: FOOD EMBOSSING STAMPER DEVICE

Priority: US20020406443P 20020828 US20020406448P 20020828 US20030404376 20030401 US20060447216 20060605 US20050068275 20050228 US20030423562 20030425 US20030634438 20030805 US20030634439 20030805 US20060802481P 20060522 US20090462865 20090811

Family:

Publication number	Publication date	Application number	Application date
US2004040443 AA	20040304	US20030404376	20030401
US2004040444 AA	20040304	US20030423562	20030425
US2004040445 AA	20040304	US20030634438	20030805
US2004040446 AA	20040304	US20030634439	20030805
US2005150394 AA	20050714	US20050068275	20050228
US2006225579 AA	20061012	US20060447216	20060605
US2010068321 AA	20100318	US20090462865	20090811
US6990892 BB	20060131	US20030634439	20030805
US7252491 BB	20070807	US20030423562	20030425
US7331776 BB	20080219	US20030404376	20030401
US8287265 BB	20121016	US20090462865	20090811

Probable Assignee: GOURMET IMPRESSION LLC

Assignee(s):(std)**:** ERRERA RICHARD B ; ERRERA RICHARD BEN ; GOURMET IMPRESSION LLC ; GOURMET IMPRESSIONS INC

Assignee(s): GOURMETIMPRESSION LLC

Inventor(s):(std)**:** ERRERA RICHARD BEN ; ERRERA RICHARD B

Inventor(s): ERRERA RICHARD

Agent(s): ALFRED M WALKER; ALFRED M; LEE GROSSKRENZ; LEE GROSSKREUZ HECHTEL; WALKER ALFRED M

International class (IPC 8–9): A21C11/00 A21C11/02 A21C11/04 A21C11/08 A21C11/10 A22C17/12 A22C7/00 A47J37/08 (Advanced/Invention); A21C11/00 A47J37/08 (Core/Invention)

International class (IPC 1–7): A23L1/00 A47J37/08 H05B1/00

CPC: A21C11/02 A21C14/00 A47J37/0892 A47J43/20 A21C11/106 A21C11/04

European class: A21C11/02 A21C11/04 A21C11/10C A21C14/00 A47J37/08L6 A47J43/20

US class: 249/140 249/141 249/142 249/217 249/63 249/74 249/92 249/97 425/111 425/194 425/236 425/298 425/299 425/318 425/363 425/385 425/404 425/440 425/812 425/96 425/96P 426/383 52/223.13 7/111 71/11 99/349 99/353 99/388 99/388P

Classification Explorer

Cited documents: WOUS06042, WO06093482 A1, WO04002229 A2, USD448402 S1, USD417464 S1, USD283964 S1, US7819650 BB, US7331776 BB, US7252491 BB, US701662 A, US6990892 BB, US6851192 BB, US6739255 BB, US6716017 BB, US6520081 BB, US6431849 BA, US6406733 BA, US6360658 BA, US6324977 BA, US6242026 BA, US6047639 A, US60439 A, US5996493 A, US5996476 A, US5992305 A, US5967041 A, US5899142 A, US5834047 A, US5789009 A, US5693141 A, US5665299 A, US5642667 A, US5642659 A, US5576031 A, US5505133 A, US5435245 A, US5419250 A, US5410962 A, US5377599 A, US5303473 A, US522465 A, US5074778 A, US5048415 A, US5017394 A, US4815859 A, US4803922 A, US4765029 A, US4656927 A, US4578273 A, US4532642 A, US4426200 A, US4348166 A, US4290349 A, US4285978 A, US422465 A, US4149459 A, US4029012 A, US4010684 A, US3994652 A, US3973495 A, US3936255 A, US3892988 A, US3537394 A, US3536014 A, US2994286 A, US2839994 A, US2837761 A, US2791960 A, US2337487 A, US2119260 A, US2099679 A, US2099286 A, US2075157 A, US2008725 A, US2007275143 AA, US2005277531 AA,

US2002197346 AA, US2002050215 AA, US1989287 A, US1965276 A, US177319 A, US1624214 A, US126833 A, US1162425 A,

Forward Citations: WO10123435, WO08118965, WO06041531, USD779290, USD684020, USD680826, USD680825, USD680824, USD680819, USD680817, USD680816, US9648902, US9615586, US9452627, US9220280, US9215952, US9149046, US9044026, US9033693, US9012945, US8956138, US8955431, US8936461, US8701552, US8458814, US8304008, US8287265, US8202073, US7914834, US7703844, US7686752, US2016081388, US2015030741, US2014265005, US2014245910, US2014203316, US2014113018, US2014017350, US2013059024, US2013034640, US2012231105, US2011318462, US2011287153, US2011265809, US2010306136, US2010263556, US2010227024, US2010107900, US2010068321, US2009238924, US2008241326, US2008203777, US2008118605, US2007254791, US2007144359, US2007122530, US2007092614, US2007059413, US2006286244, US2006266192, US2006225579, US2006182859, US2006094576, US2005150394, US2004074398, KR200447271, KR101140440, GB2423051, CN104365712,

Abstract:
Source: US2004040443A An impression device for food items. More particularly, the present invention is a stamping device designed to create images upon a variety of foods for decoration and/or marketing purposes. The stamper device of the present invention has the general appearance of a traditional rubber stamp, with large knob at the top to quickly adjust the depth of embossings. Small wings beside the knob provide an instant feature for orientation and comfortable ergonomic grip. The device provides both an emboss−only mode, and emboss−and−cut simultaneously mode, much in the manner of a cookie cutter. A simple snap means located at the bottom of the device functions to change such modes. Under the base of the device is a "socket set" style snap−in stamping die. As is the case with the roller device, the stamper device may be utilized for: 1) standard messages and images; 2) snap−in letters, which allows the user to assemble his or her own custom message; or 3) custom logos, messages, and images.

0) WO16127130A1 – MEDICAL APPARATUS INCLUDING AN IMPLANTABLE SYST...

27) Family number: 63123518 (WO16127130A1) © PatBase

Title: MEDICAL APPARATUS INCLUDING AN IMPLANTABLE SYSTEM AND AN EXTERNAL SYSTEM

Priority: US20150112858P 20150206

Family:

Publication number	Publication date	Application number	Application date
WO16127130 A1	20160811	WO2016US16888	20160205

Probable Assignee: NALU MEDICAL INC

Assignee(s):(std)**:** HARTLEY LEE FASON ; NALU MEDICAL INC ; PIVONKA DANIEL ; YAKOVLEV ANATOLY

Inventor(s):(std)**:** FLAHERTY J CHRISTOPHER ; FLAHERTY R MAXWELL ; HARTLEY LEE FASON ; PIVONKA DANIEL ; YAKOVLEV ANATOLY

Inventor(s): FLAHERTY R ; FLAHERTY J

Agent(s): CHAN DARBY ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A61N1/00 A61N1/36 (Advanced/Invention)

CPC: A61N1/37252 A61N1/3605 A61N1/37229 A61N1/37288 A61N2/008

Classification Explorer

Cited documents: US2014288393 AA, US2014275847 AA, US2012004708 AA, US2008300660 AA,

Forward Citations: WO17044904,

Abstract:
A medical apparatus for a patient comprises an external system configured to transmit one or more transmission signals, each transmission signal comprising at least power or data; and an implantable system configured to receive the one or more transmission signals from the external system. The apparatus can be configured to treat a patient and/or record patient data. Methods of treating a patient and recording patient data are also provided.

28) Family number: 32485502 (US2005276525A) © PatBase

Title: FLEXIBLE PACKAGING STRUCTURE WITH A BUILT–IN OPENING AND RECLOSE FEATURE, AND METHOD FOR MAKING SAME

Priority: EP20050754271 20050526 EP20100007352 20050526 US20040578984P 20040611 US20050098872 20050405 WO2005US18614 20050526 US20090556292 20090909 US20110031469 20110221

Family:

Publication number	Publication date	Application number	Application date
AR049910 AA	20060913	AR2005P102377	20050613
AU2005254459 AA	20051229	AU20050254459	20050526
AU2005254459 BB	20081218	AU20050254459	20050526
BRPI0510773 A	20071120	BR2005PI10773	20050526
BRPI0510773 B1	20170509	BR2005PI10773	20050526
CA2569646 AA	20061206	CA20052569646	20050526
CA2569646 C	20111011	CA20052569646	20050526
DE602005042126 D1	20140130	DE200560042126T	20050526
DE602005043614 D1	20140612	DE200560043614T	20050526
EP1753670 A1	20070221	EP20050754271	20050526
EP1753670 B1	20131211	EP20050754271	20050526
EP2243716 A1	20101027	EP20100007352	20050526
EP2243716 B1	20140507	EP20100007352	20050526
ES2451624 T3	20140328	ES20050754271T	20050526
ES2490218 T3	20140903	ES20100007352T	20050526
JP2008502555 T2	20080131	JP20070527573T	20050526
JP4418495 B2	20100217	JP20070527573T	20050526
MXPA06014226 A1	20070312	MX2006PA14226	20050526
US2005276525 AA	20051215	US20050098872	20050405
US2010113241 AA	20100506	US20090556292	20090909
US2011139363 AA	20110616	US20110031469	20110221
US7717620 BB	20100518	US20050098872	20050405
US8262830 BB	20120911	US20090556292	20090909
US8262832 BB	20120911	US20110031469	20110221
WO05123535 A1	20051229	WO2005US18614	20050526

Probable Assignee: SONOCO DEV INC

Assignee(s):(std)**:** HEBERT ROBERT CHARLES ; HUFFER SCOTT WILLIAM ; PRIZZI JOHN A ; REESE BARRY ROLAND ; SONOCO DEV INC

Assignee(s): SONOCO DEVELOPMENT INC ; SONOCO DEVELOPMENT INC HARTSVILLE

Inventor(s):(std)**:** HEBERT ROBERT C ; HEBERT ROBERT CHARLES ; BARRY ROLAND REESE ; HERBERT ROBERT CHARLES ; HUFFER SCOTT W ; HUFFER SCOTT WILLIAM ; JOHN A PRIZZI ; PRIZZI JOHN A ; REESE BARRY R ; REESE BARRY ROLAND ; ROBERT CHARLES HEBERT ; SCOTT WILLIAM HUFFER

Inventor(s): REESE BARRY ROLAND HARTSVILLE ; PRIZZI JOHN A SOUTHBURY ; REESE BARRY ; PRIZZI JOHN ; HUFFER SCOTT WILLIAM HARTSVILLE ; HUFFER SCOTT ; HEBERT ROBERT ; HEBERT ROBERT CHARLES COCKEYSVILLE ; HEBERT ROBERT CHARLES RUXTON

Agent(s): PIZZEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; SIM AND MCBURNEY; KINSLER MAUREEN CATHERINE; HARGREAVES TIMOTHY EDWARD; LEHMANN MARIA ISABEL; ALSTON AND BIRD LLP, BANK OF AMERICA PLAZA; ALSTON AND BIRD LLP BANK OF AMERICA PLAZA; ALSTON AND BIRD LLP

Designated states:

AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B29C59/00 B31B1/25 B31B1/62 B31B1/90 B32B27/08 B32B38/04 B65D33/00 B65D33/20 B65D65/32 B65D65/40 B65D75/58 B65D77/20 B65D77/38 (Advanced/Invention); B32B27/00 (Core/Invention)

International class (IPC 1–7): B32B27/08 B65D33/00 B65D75/58 B65D77/20

CPC: Y10T156/1057 Y10T156/1059 Y10T156/1082 Y10T156/1084 B29C59/007 B29C2791/009 B65D75/5833 B31B19/74 B31B2237/05 B32B27/32 B32B37/1292 B32B38/0004 B32B38/0008 B32B2553/00 B65D75/5838 B65D77/2096 B65D75/5855 B31B2219/90

European class: B29C59/00G B31B19/90 B65D75/58E1 B65D75/58F L29C791/00E10 L31B219/90

US class: 156/253 156/254 156/268 156/269 383/113 383/113S 383/116 383/116S 383/203 383/203P 383/207 383/211 383/211S 383/66 383/66S 493/210 493/210S 493/213 493/213P 493/228 493/228S 493/264 493/264S

Classification Explorer

Cited documents: WO03059776 A1, WO02066341 A1, WO0104020 A1, US6918532 BB, US6554134 BA, US6517243 BB, US6457585 BA, US6450685 BA, US6428867 BA, US6417243 BA, US6383592 BA, US6120860 A, US6056141 A, US5531325 A, US5229180 A, US5158499 A, US5065868 A, US4840270 A, US4790436 A, US4723301 A, US4679693 A, US4653250 A, US4610357 A, US4552269 A, US4411365 A, US4260061 A, US3790744 A, US2005247764 AA, US2004206637 AA, US2003231811 AA, US2002114541 AA, EP1449789 A1, EP0957045 A1, EP0905048 A1, EP0796208 A1, EP0661154 A1, EP0408831 A1,

Forward Citations: WO17002002, WO17002001, WO16189108, WO16131742, WO16131741, WO16131740, WO16051367, WO15085041, WO15075420, WO15038880, WO14128037, WO14074506, WO11090373, WO11067250, WO11004156, WO11004156, WO10112271, WO10111135, WO10068645, WO10013218, WO10002834, WO09111153, WO08131194, WO08115693, USD788582, USD787319, USD784127, USD781702, USD778719, USD777026, USD772069, USD768479, USD766082, USD764914, USD761651, USD756801, USD756800, USD756219, USD754534, USD753996, USD753995, USD750477, USD748471, USD747646, USD747202, USD747195, USD747189, USD746673, USD740114, USD739232, USD734144, USD733549, USD730725, USD726535, USD725467, USD715643, USD608193, US9676537, US9676532, US9663282, US9662867, US9656783, US9650180, US9643766, US9636895, US9630761, US9617048, US9597852, US9550616, US9533813, US9522499, US9475615, US9422080, US9365003, US9233780, US9221590, US9216850, US9205967, US9187228, US9169054, US9169052, US9162786, US9162414, US9150342, US9139321, US9126359, US9102454, US9090383, US8951591, US8944270, US8889205, US8826959, US8794471, US8753012, US8746490, US8746483, US8722122, US8607980, US8602244, US8602242, US8551588, US8545099, US8540612, US8528765, US8408793, US8408792, US8393469, US8354132, US8333511, US8308363, US8257533, US8252352, US8241194, US8231024, US8173233, US8114451, US8066137, US7971718, US7967510, US7963413, US7901719, US7811614, US7744517, US7681732, US7533773, US2016130041, US2015321438, US2015239619, US2015151872, US2015144141, US2014286596, US2014177983, US2014079343, US2014069923, US2014048438, US2013224346, US2013165887, US2013145731, US2013114918, US2013064934, US2012312868, US2012294553, US2012273515, US2012258279, US2012211537, US2012156437, US2012082764, US2012067009, US2012048857, US2011253771, US2011180553, US2011147254, US2011103718, US2011062043, US2011011864, US2011011038, US2010288764, US2010278454, US2010273377, US2010273017, US2010247003, US2010172604, US2010166342, US2010147724, US2010120313, US2010113239, US2010111453, US2010029455, US2010002963, US2009317578, US2009304874, US2009226117, US2009127281, US2009120828, US2009039078, US2008260305, US2008260304, US2008214376, US2008199109, US2008037913, US2007284032, US2006124494, TWI522289, NL2006011, KR20140082624, KR101579003, KR101495252, JP5709959, JP2014012561, JP2013526466, JP2013091529, JP2012197097, JP2012046214, JP2011513153, JP2011184083, JP2011025939, JP2010228797, JP2008200960, JP2008162692, JP2008023927, JP2008023926, JP2007253395, ITPD20080230, ITPD20080228, ITMO20100074, GB2543264, GB2535469, GB2483254, EP3159280, EP2769930, EP2769929, EP2762413, EP2650230, EP2650128, EP2650128, EP2574570, EP2520424, EP2508445, EP2481686, EP2460739, EP2457845, EP2456685, EP2347972, EP2236275,

EP2230191, EP2147868, EP1975081, EP1939107, EP1886934, EP1886934, EP1849579, DE202011109904, DE102011075466, DE102010005554, DE102009047369, DE102009000331, DE102008040046, DE102008033611, CN105745162, CN102689731, CN102470661, AU2012202031, AU2010270024, AU2007214309, AU2007203582,

Abstract:
Source: US2005276525A A flexible packaging laminate is formed to have a built−in opening and reclose feature by forming the laminate as a two−part structure having an outer structure joined in face−to−face relation with an inner structure. Score lines are formed in both structures to enable an opening to be formed through the laminate by lifting an opening portion (e.g., a flap or the like) of the two structures out of the plane of the laminate. The score line through the outer structure defines a larger opening than the score line through the inner structure, such that a marginal region of the outer structure extends beyond the edge of the opening portion of the inner structure. A pressure−sensitive adhesive is used to re−adhere the marginal region to an underlying surface of the inner structure adjacent the opening through the laminate.

29) Family number: 60560477 (US2015291313A) © PatBase

Title: ARTICLE FOR USE AS SLEEVE OR COASTER WITH A BEVERAGE CONTAINER

Priority: US20140248623 20140409 US20170397378 20170103

Family:

Publication number	Publication date	Application number	Application date
US2015291313 AA	20151015	US20140248623	20140409
US2017156527 AA	20170608	US20170397378	20170103
US9533794 BB	20170103	US20140248623	20140409
WO15157275 A1	20151015	WO2015US24702	20150407

Probable Assignee: VARA JAMES E

Assignee(s):(std)**:** VARA JAMES E

Inventor(s):(std)**:** VARA JAMES E

Agent(s): ALBANESI TODD E

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A47G23/02 A47G23/03 A47G23/032 B65D23/08 B65D25/20 B65D25/24 B65D3/28 B65D81/38 (Advanced/Invention)

CPC: B65D23/085 A47G23/0241 A47G23/0266 B65D81/3876 A47G23/0313 A47G23/0316 A47G23/0306 A47G23/032 A47G2023/0275

US class: 220/737

Classification Explorer

Cited documents: US8627982 BB, US8297490 BB, US7264134 BB, US7000801 BB, US6948617 BB, US6405921 BA, US6257485 BA, US6026983 A, US4907703 A, US4859360 A, US2013075412 AA, US2013043261 AA, US2009114661 AA, US2009078594 AA, US2006144915 AA, US2006043097 AA, US2003111375 AA, US2002104613 AA, US1868174 A, KR20110003713 U, JP7020941 U1,

Abstract:
Source: US2015291313A An article that can be formed into a sleeve or a coaster for a beverage container. The article includes: (a) a first sheet that is at least sufficiently flexible to be wrapped around the cylindrical body of the beverage container to position an inner surface of an end portion of the first sheet adjacent an outer surface of a tab portion of the first sheet to form an overlapping area between the end portion and the tab portion; (b) a first adhesive on a first portion of an inner surface of the first sheet, wherein the first portion is at least partially within the overlapping area; and (c) a second adhesive on a second portion of the inner surface of the first sheet, wherein the second portion is at least partially outside the overlapping area, and wherein the first adhesive and the second adhesive can be the same or different.

0) US2003031386A – RECLOSABLE BAGS

30) Family number: 30377332 (US2003031386A) © PatBase

Title: RECLOSABLE BAGS

Priority:

EP19990956952	19991105	EP19990956952	19991105	EP20010968751	20010910
EP20020022308	19991105	US19990293257	19990416	US19980187389	19981106
US19990159489P	19991014	US19990228819P	19990416	US20000231377P	20000908
US20070927261	20071029	US20050257347	20051024	WO1999US26261	19991105
US20030688720	20031015	US20000718002	20001121	US20030357608	20030204
US20000240288P	20001013	US20000240288P	20001013	US20050180497	20050712
US20030413506	20030414	US20030384338	20030307	US20020218048	20020812
WO2001US31689	20011011	WO2001US31689	20011011	WO2001US28279	20010910
WO2003US25414	20030812				

Family:

Publication number	Publication date	Application number	Application date
AU200013448 A1	20000529	AU20000013448	19991105
AU200013448 A5	20000529	AU20000013448	19991105
AU2001288977 AA	20020322	AU20010288977	20010910
AU2001296787 AA	20020422	AU20010296787	20011011
AU200188977 A5	20020322	AU20010088977	20010910
AU200196787 A5	20020422	AU20010096787	20011011
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CN1325354 A	20011205	CN19998013022	19991105
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DE60109800 D1	20050504	DE20016009800	20011011
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EP1127011 A1	20010829	EP19990956952	19991105
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EP1326783 A1	20030716	EP20010977687	20011011
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EP1337441 A1	20030827	EP20010968751	20010910
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EP1681155 A3	20070228	EP20060005437	19991105

EP1681155 B1	20090107	EP20060005437	19991105	
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US6991375 BB	20060131	US20030357608	20030204	
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US7308783 BB	20071218	US20050180497	20050712	
US7406810 BB	20080805	US20050257347	20051024	
US7424796 BB	20080916	US20070927261	20071029	
WO0027721 A1	20000518	WO1999US26261	19991105	
WO0027721 C2	20001109	WO1999US26261	19991105	
WO0220363 A1	20020314	WO2001US28279	20010910	
WO0220363 B1	20020711	WO2001US28279	20010910	
WO0230772 A1	20020418	WO2001US31689	20011011	
WO0230772 B1	20020711	WO2001US31689	20011011	
WO04014751 A2	20040219	WO2003US25414	20030812	
WO04014751 A3	20040617	WO2003US25414	20030812	

Probable Assignee: VELCRO BVBA

Assignee(s):(std)**:** CLUNE WILLIAM ; CLUNE WILLIAM P ; PROVOST GEORGE A ; SHEPARD WILLIAM H ; VELCRO IND A NETHERLANDS C BV ; VELCRO IND NETHERLAND CORP BV ; VELCRO IND NL BV ; VELCRO IND BV ; VELCRO IND

Assignee(s): VELCRO IND A NETHERLANDS BV CORP ; VELCRO IND CURACAO BV ; VELCRO IND NETHERLAND BV CORP ; VELCRO IND A NETHERLANDS CORP BV ; VELCRO BVBA ; KINGSFORD HOWARD A

Inventor(s):(std)**:** CLUNE WILLIAM ; CLUNE WILLIAM P ; KINGSFORD HOWARD A ; PROVOST GEORGE A ; SHEPARD WILLIAM H ; WILLIAMH SHEPARD ; WILLIAM P CLUNE ; WILLIAM H SHEPARD ; WILLIAM CLUNE ; WH SHEPARD ; W CLUNE ; SHEPARD WILLIAN H ; PROVOST G A ; PROVOST A ; GEORGEA PROVOST ; GEORGE A PROVOST ; GA PROVOST ; CLUNE W ; SHEPARD W H ; SHEPARD H

Inventor(s): PROVOST GEORGE ; W H SHEPARD ; G A PROVOST ; SHEPARD WILLIAM

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; SMART AND BIGGAR; MUELLER–BORE AND PARTNER PATENTANWAELTE; FISH AND RICHARDSON PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI

SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A44B18/00 B29C43/22 B29C65/00 B31B1/64 B31B1/90 B31B19/90 B31B23/60 B31B23/74 B65B3/16 B65B39/02 B65B43/04 B65B43/26 B65B43/30 B65B61/18 B65B7/14 B65B9/08 B65B9/20 B65D27/06 B65D33/00 B65D33/08 B65D33/14 B65D33/16 B65D33/24 B65D33/25 B65D33/38 B65D75/58 B65D75/62 B65D77/12 B65D77/30 B65D77/36 B65D77/38 B65D85/50 (Advanced/Invention); B65B9/00 B65D33/00 B65D33/14 B65D33/25 (Advanced/Non–invention); A44B18/00 B29C43/22 B29C65/00 B31B1/60 B31B1/74 B31B19/00 B31B23/00 B65B9/10 B65D33/00 B65D33/06 B65D33/14 B65D33/16 B65D33/25 B65D77/10 B65D77/22 (Core/Invention)

International class (IPC 1–7): A44B1/04 A44B18/00 B29C47/06 B29C65/00 B31B1/64 B31B1/90 B31B19/90 B31B23/64 B31B23/90 B65B39/02 B65B43/30 B65B9/08 B65B9/20 B65D33/00 B65D33/08 B65D33/14 B65D33/16 B65D33/24 B65D33/25 B65D33/38 B65D75/58 B65D77/12 B65D77/30 B65D77/36 B65D77/38 B65D85/50 C12C1/027

CPC: B65D75/5866 B65D27/06 B65D2313/04 B65D2101/0023 Y10S493/927 B29C65/5028 B29C65/5092 B29C65/305 B29C65/743 A44B18/00 B29C65/18 B29C65/5057 B29C65/7894 B29C66/1122 B29C66/133 B29C66/4312 B29C66/4322 B29C66/4722 B29C66/80 B29C66/849 B29C66/8511 B29L2031/7128 B31B2219/9016 B29C43/46 B29C2043/461 B29C66/81419 B29C66/81423 B29C66/81427 B29C66/81431 B29C66/81433 B29C66/81435 B29C65/4815 B29C65/4825 B29C66/431 Y10T24/15 Y10T24/2733 Y10T24/2742 Y10T24/2792 B29C66/83413 B29C66/83415 B29C66/83543 B29C66/836 B29C66/83221 B29C66/49 B29C66/818 B29C66/71 A44B18/0084 B29C43/222 B29C2043/465 B29L2031/729 B31B2219/2627 B31B2219/9019 B31B2237/10 B31B2237/40 B31B2237/406 B31B2237/50 B65B61/188 B65D33/24 B65D2313/02 B31B19/00 B65B9/20

European class: A44B18/00 A44B18/00G8 B29C43/22B B29C65/18 B29C65/50C B29C65/743 B29C65/74D B29C65/78M10D B29C66/1122 B29C66/133 B29C66/40 B29C66/4312 B29C66/4322 B29C66/4722 B29C66/80 B31B19/90 B31B19/90B B31B23/00 B65B61/18E B65B9/20 B65D27/06 B65D33/24 B65D75/58G1 L29C43/46A4 L29C66/849 L29C66/8511 L29L31/7128 L29L31/729 L31B219/26B L31B219/90C1 L31B219/90C1A L31B237/10 L31B237/40 L31B237/40B L31B237/50 L65D101/00A3 L65D313/02 L65D313/04

US class: 156/244.15 24/30.50R 24/30.5R 24/305R 24/445 24/446 24/452 264/167 264/171.13 383/1 383/10 383/10S 383/203 383/203P 383/203S 383/204 383/204S 383/206 383/206S 383/210.1 383/61.1 383/61.100P 383/62 383/66 383/66P 383/67 383/67S 383/86 383/86S 383/93 383/93P 383/95 383/95P 383/95S 426/106 426/106P 426/118 426/122 426/123 493/212 493/927 53/133.1 53/133.3 53/133.4 53/134.1 53/139.2 53/329.3 53/412 53/412P 53/450 53/451 53/452 53/455 53/456 53/459 53/468 53/468S 53/469 53/469P 53/469S

Classification Explorer

Cited documents: WO9629256 A1, WO8702646 A1, WO0191593 A2, WO0027721 A1, USRE34347 E, US9818401, US922292 A, US922292, US7308783 BB, US7163706 BB, US6991375 BB, US6991372 BB, US6829873 BB, US6769229 BB, US6688079 BB, US6656403 BA, US6637939 BB, US6637939 BA, US6595690 BB, US6572267 BA, US6533456 BA, US6499878 BA, US6398412 BB, US6378177 BA, US6367128 BA, US6354738 BA, US6244748 BA, US6213641 BA, US6205623 BA, US6202260 BA, US6152601 A, US6116314 A, US6115892 A, US6106153 A, US6079878 A, US6060146 A, US6019512 A, US6010244 A, US6002260 A, US5985407 A, US5964399 A, US5954433 A, US5951453 A, US5934806 A, US5924795 A, US5902047 A, US5887320 A, US5873456 A, US5857245 A, US5853247 A, US5829884 A, US5823933 A, US5806984 A, US5782733 A, US5773120 A, US5763041 A, US5745961 A, US5725312 A, US5699593 A, US5669120 A, US5664303 A, US5620769 A, US5611791 A, US5601368 A, US5582853 A, US5525363 A, US5515583 A, US5512234 A, US5492705 A, US5480230 A, US5461845 A, US5456928 A, US5413568 A, US5412924 A, US5405629 A, US5369853 A, US5369847 A, US5360270 A, US5354591 A, US5315740 A, US5268969 A, US5265960 A, US5260115 A, US5260015 A, US5238587 A, US5215380 A, US5172981 A, US5172980 A, US5166140 A, US5133555 A, US5129734 A, US5121997 A, US5116140 A, US5113555 A, US5088164 A, US5077064 A, US5074416 A, US5071061 A, US5067822 A, US5063069 A, US5059036 A, US5050736 A, US5048692 A, US5032122 A, US5026563 A, US5024537 A, US5014856 A, US5005707 A, US5002783 A, US4984339 A, US4967451 A, US4966470 A, US4955981 A, US4953708 A, US4946289 A, US4913293 A, US4824261 A, US4812074 A, US4794028 A, US4782951 A, US4761318 A, US4759652 A, US4706297 A, US4691370 A, US4677697 A, US4672722 A, US4654246 A, US4638912 A, US4637063 A, US4620320 A, US4592118 A, US4580683 A, US4567987 A, US4534752 A, US4343158 A, US4337889 A, US4332344 A, US4241865 A, US4191230 A, US4169303 A, US4136726 A, US4079767 A, US3998304 A, US3856198 A, US3807626 A, US3780781 A, US3744211 A, US3727829 A, US3696472 A, US3687358 A, US3655118 A, US3594865 A, US3557853 A, US3494865 A, US3464094 A, US3446420 A, US3417440 A, US3387345 A, US3372438 A, US3325084 A, US2978769 A, US293257 A, US22881999 P,

US2004001927 AA, US1980104 A, US187389 A, US18401 A, US15948999 P, JP5132067 A2, JP5046748 A2, GB2184997 A1, FR1578114 A, EP0808585 A2, DE1195509 B,

Forward Citations: WO16096378, WO15191504, WO15179365, WO15049220, WO13178584, WO13122972, WO13122970, WO13122940, WO13057725, WO12103418, WO12103395, WO12073999, WO11137097, WO11130022, WO11130020, WO11081703, WO11081703, WO11019511, WO11019503, WO09108640, WO09072068, WO09004135, WO09004135, WO08022308, WO07046965, WO06112448, WO06061062, WO06056635, WO06005849, WO06005849, WO05082736, WO04058584, WO04058584, WO04058062, WO04014751, WO04014751, WO03004379, WO0230772, WO0230771, WO0220363, WO02074645, WO02074645, US9656784, US9649792, US9586724, US9550617, US9532584, US9504295, US9487333, US9475616, US9382461, US9365326, US9346249, US9322746, US9315299, US9260214, US9254620, US9221591, US9211976, US9156224, US9126735, US9096780, US9096351, US8979370, US8900109, US8893457, US8875478, US8875356, US8858077, US8807834, US8800250, US8763890, US8727621, US8685194, US8646975, US8641278, US8622618, US8597721, US8596867, US8568031, US8550716, US8545740, US8540428, US8506165, US8470404, US8469593, US8448305, US8413306, US8398306, US8389596, US8314283, US8301458, US8231816, US8231273, US8225467, US8182407, US8167487, US8123219, US8117804, US8105638, US8069537, US8051540, US7967509, US7963007, US7946766, US7887653, US7887238, US7874731, US7857515, US7819244, US7806677, US7748200, US7681732, US7641469, US7601284, US7462313, US7458575, US7451532, US7441389, US7424796, US7406810, US7395583, US7340807, US7308783, US7305805, US7303711, US7262335, US7241255, US7217119, US7192266, US7186025, US7163706, US7032751, US6991375, US6939282, US6928657, US6756097, US6692149, US6660202, US6656403, US6544245, US6332250, US2016318666, US2016128381, US2016073717, US2016031608, US2016016692, US2015375902, US2015104614, US2014069061, US2013209004, US2013182977, US2013180345, US2013071047, US2013053710, US2012314979, US2012270712, US2012269469, US2012224795, US2012207410, US2012067374, US2012035036, US2011253289, US2011038571, US2011038570, US2011036741, US2011026855, US2010290723, US2010288394, US2010183247, US2010150477, US2010144507, US2010139217, US2010135600, US2010119180, US2010101135, US2010074562, US2010069211, US2009297071, US2009282654, US2009279813, US2009263051, US2009226119, US2009217492, US2009216371, US2009212098, US2009178945, US2009165922, US2009152139, US2009148081, US2009108519, US2009025868, US2009010735, US2008159666, US2008131035, US2008118609, US2008093241, US2008056622, US2008050247, US2008050055, US2008050052, US2008044114, US2008002919, US2008000200, US2007264469, US2007242905, US2007190194, US2007140600, US2007127850, US2007104395, US2007102106, US2007101557, US2007062161, US2007029695, US2007021284, US2006263463, US2006249870, US2006226571, US2006200107, US2006177158, US2006168776, US2006162289, US2006162288, US2006117537, US2006071417, US2006066002, US2006062496, US2006023974, US2006003879, US2005286817, US2005186387, US2005181352, US2005166372, US2005151293, US2005117819, US2005078891, US2005051567, US2004181156, US2004167456, US2004131731, US2004121694, US2004121107, US2004078869, US2004078860, US2004008909, US2004008908, US2003228078, US2003084553, US2003081864, US2003031386, US2002168120, US2002035747, US2002000488, RU2578567, RU2516477, KR20120057628, KR101654050, KR101568885, KR101494587, KR101447529, JP5952742, JP4787833, JP4787833, JP2013542147, JP2006213366, GB2393433, GB2393433, FR2939775, FR2917275, EP2829391, EP2567907, EP2535288, EP2371527, EP2351691, EP2340790, EP2202173, EP2172385, EP2067710, EP1832524, EP1829789, EP1785052, EP1783063, EP1720775, EP1689259, EP1686061, EP1677639, EP1640133, EP1594752, EP1464585, DE102011053275, DE102004056043, DE10121525, CN105764664, CN104995011, CN103231846, CN102958396, CN102958396, CN102947192, CN102947092, CN102947092, CN102548869, CN102548860, CN102548859, CN102548859, AU2013221766, AU2012211147, AU2010282895, AU2010282811, AU2008270170, AU2008270170, AU2002317292,

Abstract:
Source: US2003031386A A reclosable bag has a closure including first and second fastener strips. The first fastener strip includes a strip form base having an array of discrete hook fastener elements integrally molded with and extending from the base. The second fastener strip includes loop elements engageable by the hook fastener elements. The polyethylene bases of the fastener strips are welded directly to the body of the mailer, which is formed of a coextrusion of polyethylene materials. One of the fastener strips is unattached to the bag body along most of its length, so as to avoid undesired opening by shifting of bag contents. The bag is useful as an interoffice mailing envelope, for example.

0) US5112449A – TWO PHASE METAL/OXIDE FILMS

31) Family number: 3286813 (US5112449A) © PatBase

Title: TWO PHASE METAL/OXIDE FILMS

Priority: CA19890594495 19890322 CA19890614985 19890929 US19920827563 19920128 US19900497222 19900322 CA19890615000 19890929

Family:

Publication number	Publication date	Application number	Application date
AT106460 E	19940615	AT19900303077T	19900322
AT108494 E	19940715	AT19900303069T	19900322
AU199052112 A1	19900927	AU19900052112	19900322
AU199052113 A1	19900927	AU19900052113	19900322
AU617935 B2	19911205	AU19900052112	19900322
BRPI9001348 A	19910402	BR1990PI01348	19900322
BRPI9001349 A	19910402	BR1990PI01349	19900322
CA1334055 A1	19950124	CA19890615000	19890929
CA1337980 A1	19960123	CA19890614985	19890929
DE69009278 D1	19940707	DE19906009278	19900322
DE69009278 T2	19940908	DE19906009278T	19900322
DE69010531 D1	19940818	DE19906010531	19900322
DE69010531 T2	19950223	DE19906010531T	19900322
EP0389274 A2	19900926	EP19900303069	19900322
EP0389274 A3	19901010	EP19900303069	19900322
EP0389274 B1	19940713	EP19900303069	19900322
EP0391578 A1	19901010	EP19900303077	19900322
EP0391578 B1	19940601	EP19900303077	19900322
ES2054242 T3	19940801	ES19900303077T	19900322
ES2056375 T3	19941001	ES19900303069T	19900322
JP3033802 A2	19910214	JP19900075367	19900322
JP3056690 A2	19910312	JP19900075368	19900322
NO901331 A	19900924	NO19900001331	19900322
NO901331 A0	19900322	NO19900001331	19900322
NO901332 A	19900924	NO19900001332	19900322
NO901332 A0	19900322	NO19900001332	19900322
US5112449 A	19920512	US19900497555	19900322
US5218472 A	19930608	US19920827563	19920128

Probable Assignee: NOVELIS INC

Assignee(s):(std)**:** ALCAN INT LTD

Assignee(s): ALCAN INTERNAITONAL LIMITED ; ALCAN INTERNATIONAL LIMITED ; ALCAN INTERNATIONAL LTD ; ALCAN INTERNATIONAL LTD MONTREAL QUEBEC ; ALCAN INTERNATIONAL LTD MONTREAL QUEBEC CA ; CITICORP NORTH AMERICA INC ; NOVELIS INC ; ALCAN INTERNATL LTD ; UBS AG ; LASALLE BUSINESS CREDIT LLC ; BANK OF AMERICA NATIONAL ASSOCIATION ; NOVELIS CORP ; NOVELIS CAST HOUSE TECHNOLOGY LTD ; NOVELIS NO 1 PARTNERSHIP LTD ; NOVELIS NO1 PARTNERSHIP LTD ; UBS STAMFORD BRANCH AG ; ROSENFELD ARON MARCUS ; JOZEFOWICZ MARK ADRIAN ; ALCAN INT

Inventor(s):(std)**:** JOZEFOWICZ MARK A ; JOZEFOWICZ MARK ADRIAN ; ADRIAN JOZEFOWICZ MARK ; ARON MAAKASU ROOZENFUERUDO ; MAAKU EIDORIAN JIYOZEFUUITSUTS ; ROSENFELD ARON M ; ROSENFELD ARON MARCUS ; MARCUS ROSENFELD ARON

Inventor(s): MARK ADRIAN JOZEFOWICZ ; ROSENFELD ARON MARCUS KINGSTON ONTARIO K7L 5J4 ; ROSENFELD ARON MARCUS KINGSTON ONTARIO K7L 5J4 CA ; MAAKU EIDORIAN JIYOZEFUUITSUTSU ; ARON MARCUS ROSENFELD ; JOZEFOWICZ MARK

ADRIAN KINGSTON ONTARIO K7L 4M4 ; JOZEFOWICZ MARK ADRIAN KINGSTON ONTARIO K7L 4M4 CA

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; KIRBY EADES GALE BAKER

Designated states: AT BE CH DE DK ES FR GB GR IT LI LU NL SE

International class (IPC 8–9): B32B7/02 B32B9/00 B65D81/34 C23C14/14 C23C14/34 C23C28/00 C23C28/02 C25D11/04 C25D11/12 C25D11/18 C25D11/20 G01K11/00 G02B5/28 G11B5/64 G11B5/72 G11B5/73 G11B5/738 H05B6/64 (Advanced/Invention);
B32B7/02 B32B9/00 C23C14/14 C23C14/34 C23C28/00 C25D11/04 G11B5/64 G11B5/72 (Advanced/Non–invention);
B32B7/02 B32B9/00 B65D81/34 C23C14/14 C23C14/34 C23C28/00 C25D11/04 C25D11/18 G02B5/28 G11B5/62 G11B5/64 G11B5/72 (Core/Invention)

International class (IPC 1–7): A47J36/00 B01J35/06 B01J35/06 B01J35/10 B32B15/04 B32B15/20 B32B3/26 B32B3/30 B32B7/02 B32B9/00 B44F1/12 B65D65/40 B65D81/24 B65D81/34 C09C1/62 C09C3/04 C09C3/06 C09C3/06 C09D11/00 C09D11/00 C09D5/29 C23C14/14 C23C14/34 C23C28/00 C23C28/02 C25D11/02 C25D11/04 C25D11/12 C25D11/14 C25D11/18 C25D11/20 C25D11/22 C25D5/34 C25D5/44 G01K11/00 G01K11/00 G02B5/12 G02B5/28 G02F1/21 G11B5/64 G11B5/72 G11B5/84 H01F10/00 H05B6/64

CPC: B42D2035/24 G01N21/81 G02B5/286 B65D81/3446 B65D2581/344 B65D2581/3466 B65D2581/3472 B65D2581/3487 B65D2581/3494 C25D11/12 C25D11/18 Y10T428/12042

European class: B65D81/34M C25D11/12 C25D11/18 G01N21/81 G02B5/28 G02B5/28F1 L42D35/24 L65D581/34M3A L65D581/34M4B L65D581/34M5A L65D581/34M7A L65D581/34M7S

US class: 205/175 205/201 359/584 359/585 427/162 428/550

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Forward Citations: WO9936595, WO9828781, WO9828781, WO9517475, WO9517474, WO9408073, WO16162201, WO15199639, WO15083845, WO13181540, WO09092498, WO09092498, WO07044108, WO07011547, WO06135097, WO06028605, WO05111588, WO04035400, WO03102686, WO03097376, WO03067231, WO0124929, WO0024951, WO0024951, US9644281, US9624008, US9512537, US9512536, US9487879, US9278506, US9181634, US9110289, US9051658, US8971675, US8931296, US8928967, US8830557, US8765484, US8703265, US8522990, US8506902, US8424324, US8405002, US8308066, US8201385, US8164815, US8114502, US7944603, US7846344, US7776631, US7767143, US7733552, US7719752, US7703300, US7688494, US7660058, US7660031, US7652814, US7643203, US7638735, US7629558, US7594976, US7580172, US7570415, US7567373, US7566664, US7564613, US7550794, US7535621, US7532386, US7527996, US7450295, US7449146, US7446940, US7417784, US7416776, US7404997, US7394961, US7355782, US7295368, US7177075, US7164100, US7087876, US7034399, US6888442, US6870139, US6859310, US6684647, US6495003, US6420053, US6413408, US6358566, US6350623, US6258158, US6124912, US6123986, US6005715, US5904989, US5902634, US5757278, US5696629, US5689319, US5582884, US5397410, US5259957, US5220140, US5180598, US2011170106, US2011138742, US2011132588, US2010292575, US2010123993, US2010059503, US2009235682, US2009235681, US2009199569, US2009084994, US2009040590, US2009035179, US2008239449, US2008233424, US2008231922, US2008223842, US2008218843, US2008218840, US2008196429, US2008093688, US2008049308, US2007248366, US2007247696, US2007148695, US2007108465, US2007091422, US2007051815, US2007045282, US2006272340, US2006254922, US2006032757, US2005254130, US2005042764, US2004195693, US2004184948, US2004162017, US2004076721, US2003232181, US2003224182, US2003155467, US2003027002, US2003000718, US2002092849, JP2008212844, EP2876188, EP2477027, EP2051562, EP1891414, EP1847582, EP1660848, EP1135547, EP0946890, EP0802267, EP0454313, EP0454313, CN102135634, AU743728,

Abstract:
Source: US5112449A A process for producing a two phase metal/oxide film. The process comprises forming a porous oxide film on a substrate, introducing a weakened stratum into the oxide film so that the film (or at least an outer part of the film) can be subsequently detached along the weakened stratum, depositing a metal on and/or within the pore of the film, and detaching at least the outer film part from the substrate. The detached film so

produced can be used for many purposes depending on the film thickness, position of the metal deposits on or with the pores etc. Examples include optical interference devices, magnetic media, coatings for plastics and paper, etc.

0) US2003080117A – HAND–HELD FOOD PACKAGE

32) Family number: 28528782 (US2003080117A) © PatBase

Title: Hand–held food package

Priority: US20010037424 20011029 US20020189137 20020703 WO2002US34589 20021029 US20020190210 20020703

Family:

Publication number	Publication date	Application number	Application date
AU2002353909 AA	20030512	AU20020353909	20021029
AU2002353909 BB	20080221	AU20020353909	20021029
EP1446983 A1	20040818	EP20020789308	20021029
EP1446983 A4	20061025	EP20020789308	20021029
US2003080117 AA	20030501	US20010037424	20011029
US2003080119 AA	20030501	US20020189137	20020703
US2003080120 AA	20030501	US20020190210	20020703
US6683289 BB	20040127	US20020190210	20020703
US6710315 BB	20040323	US20010037424	20011029
US6744028 BB	20040601	US20020189137	20020703
WO03039201 A1	20030508	WO2002US34589	20021029
WO03039202 A1	20030508	WO2002US34637	20021029

Probable Assignee: MARS INC

Assignee(s):(std)**:** CHISHOLM GARY N ; DECELLES STUART ; DIDO JEANNETTE ; MARS INC ; WHITMORE SHANA ; WILCOCKS NEIL A

Assignee(s): CHISHOLM GARY

Inventor(s):(std)**:** CHISHOLM GARY ; CHISHOLM GARY N ; DIDO JEANNETTE ; DECELLES STUART ; WILCOCKS NEIL A ; WHITMORE SHANA ; WILLCOCKS NEIL A

Inventor(s): SHANA WHITMORE ; NEIL A WILCOCKS ; STUART DECELLES ; JEANNETTE DIDO ; GARY N CHISHOLM

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B65D5/02 B65D5/54 B65D65/28 B65D77/02 B65D81/34 B65D81/38 H05B6/80 (Advanced/Invention)

International class (IPC 1–7): B32B3/00 B65D33/02 B65D65/28 B65D85/00 B65D85/34 H05B6/80

CPC: B65D5/029 B65D5/5445 B65D77/02 B65D81/3453 B65D81/3876 B65D2205/00 B65D2205/02 B65D2581/3467 B65D2581/3472 B65D2581/3474 B65D2581/3477 B65D2581/3478 B65D2581/3479 B65D2581/3483 B65D2581/3489 B65D2581/3494 B65D2581/3497 B65D81/3848

European class: B65D5/02K B65D5/54C B65D77/02 B65D81/34M1 B65D81/38G B65D81/38K L65D205/00 L65D205/02 L65D581/34M4C L65D581/34M5A L65D581/34M5B L65D581/34M5C L65D581/34M5C1 L65D581/34M5D L65D581/34M5G L65D581/34M7R L65D581/34M7S L65D581/34M7S2

US class: 219/729 219/730 219/732 219/735 426/112

Classification Explorer

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Forward Citations: WO13152002, WO10090932, WO10090932, WO09030783, WO08125882, WO08125882, WO07103428, WO07103428, WO06007416, USD786091, USD769718, USD740657, USD727145, USD694124, USD694106, USD570682, USD548583, USD535875, USD523744, US9637299, US9499296, US9427361, US9403347, US9254952, US9162428, US9073689, US8872078, US8866054, US8828510, US8686323, US8684224, US8642935, US8629380, US8563906, US8558149, US8440947, US8440275, US8309896, US8178822, US7982167, US7928349, US7923669, US7919738, US7893389, US7858015, US7851731, US7812293, US7777164, US7667167, US7604155, US7573010, US7473875, US7414230, US7361872, US7351942, US7112769, US7112769, US7022950, US6903320, US6784423, US2015060532, US2014314902, US2014155810, US2012261413, US2012091126, US2011233202, US2011180594, US2011147377, US2011049225, US2011024412, US2010320261, US2010297626, US2010218690, US2010193509, US2010065237, US2009242550, US2009039077, US2008315451, US2008230537, US2008197128, US2008149627, US2008149626, US2008081095, US2008078759, US2008075814, US2008067169, US2007241102, US2007221666, US2007215610, US2007215609, US2007164041, US2007151888, US2007131745, US2007131744, US2007131743, US2007131742, US2007048421, US2007039951, US2006269174, US2006172045, US2006096978, US2006062948, US2006016805, US2006001727, US2005150805, US2004256381, US2004108313, US2004096626, US2004056188, GB2542181, EP2639172, EP1798159, EP1798159,

Abstract:
Source: US2003080117A The present invention is directed to a convenient hand−held microwaveable package. The package comprises a thermal insulating surface to protect the food item. Yet further, the thermal insulating surface protects the consumer from being burned by handling the hot package. In further embodiments, the package comprises an easy open tear strip device.

0) US2005050851A – PACKAGING METHODS AND PACKS MADE THEREBY

33) Family number: 23292780 (US2005050851A) © PatBase

Title: PACKAGING METHODS AND PACKS MADE THEREBY

Priority: GB20020004602 20020227 US20030502604 20030217 US20070000740 20071217 US20040502604 20040727 WO2003EP01574 20030217 WO2002EP01574 20030217

Family:

Publication number	Publication date	Application number	Application date
AT391684 E	20080415	AT20030718667T	20030217
AU2003222747 AA	20030909	AU20030222747	20030217
CA2476572 AA	20040817	CA20032476572	20030217
CN100355635 C	20071219	CN20038004737	20030217
CN1639025 A	20050713	CN20038004737	20030217
DE60320233 D1	20080521	DE20036020233	20030217
DE60320233 T2	20080724	DE20036020233T	20030217
DK1480894 T3	20080804	DK20030718667T	20030217
EA005720 B1	20050630	EA20040001049	20030217
EA200401049 A1	20041230	EA20040001049	20030217
EP1480894 A1	20041201	EP20030718667	20030217
EP1480894 B1	20080409	EP20030718667	20030217
ES2305455 T3	20081101	ES20030718667T	20030217
GB200204602 A0	20020410	GB20020004602	20020227
HK1072925 A1	20081128	HK20050104553	20050531
HK1072925 A3	20050916	HK20050104553	20050531
HK1079496 A1	20080822	HK20050111369	20051212
HK1079496 A3	20060407	HK20050111369	20051212
JP2005518316 T2	20050623	JP20030571171T	20030217
KR101028908 B1	20110412	KR20047013471	20030217
KR20040086464 A	20041008	KR20047013471	20030217
MY135926 A	20080731	MY20030000617	20030222
PT1480894 T	20080627	PT20030718667T	20030217
US2005050851 AA	20050310	US20030502604	20030217
US2008092483 AA	20080424	US20070000740	20071217
US7331159 BB	20080219	US20030502604	20030217
US8408450 BB	20130402	US20070000740	20071217
WO03072455 A1	20030904	WO2003EP01574	20030217

Probable Assignee: INNOVIA FILMS LIMITED

Assignee(s):(std)**:** INNOVIA FILMS LTD ; OSGOOD DAVE ; UCB SA

Assignee(s): INNOVIA FILMS LIMITED ; UCB S A

Inventor(s):(std)**:** DAVE OSGOOD ; OSGOOD DAVE

Agent(s): ROBIC; BRAND THOMAS LOUIS ET AL; WENDEROTH LIND AND PONACK LLP; PING; ANDREWS KURTH LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B65B11/00 B65B11/12 B65B11/22 B65B41/00 B65B43/00 B65B51/10 B65B51/26 B65B61/18 B65B9/00 B65D65/26 B65D75/58 B65D75/62 B65D75/66 B65D75/68 (Advanced/Invention);

B65B51/10 B65B51/26 B65D75/58 (Advanced/Non−invention);
B65B11/00 B65B11/06 B65B41/00 B65B43/00 B65B61/18 B65B9/00 B65D75/52 (Core/Invention);
B65D (Subclass/Invention);
B65B (Subclass/Non−invention)

International class (IPC 1−7): B65B11/00 B65B11/12 B65B11/22 B65B41/00 B65B61/18 B65D75/58 B65D75/62 B65D75/66 B65D75/68

CPC: B29C66/81431 B29C65/18 B29C66/1122 B29C66/3472 B29C66/43121 B29C66/4322 B29C66/71 B29C66/81261 B29C66/81821 B29C66/849 B29L2031/7162 B29L2031/7416 B29C66/73711 B29C66/73712 B65D75/5844 B65B11/12 B65B11/22 B65D75/5827 B65D75/66 B65D75/68 B29C66/73713

European class: B65B11/12 B65B11/22 B65D75/58E B65D75/58E1B B65D75/66 B65D75/68

US class: 229/87.05 53/133.8 53/133.800P 53/412 53/461 53/462 53/463 53/545 53/545S 53/558 53/558S

Classification Explorer

Cited documents: WO0194098, WO0115594, US7118792 BB, US6138437 A, US6061997 A, US5630308 A, US5510165 A, US5375718 A, US5010325, US5010231, US4947994 A, US4938363 A, US4836378 A, US4638911 A, US4170305 A, US3909582, US3566752 A, US2691856 A, US2334381 A, US2308197 A, US2195222 A, US2079328 A, US2008361 A, GB2289879 A1, EP0595722 A1, EP0577509 A2, EP0577509 A1, EP0473517 A2, EP0200075,

Forward Citations: WO14161878, WO11001176, US9533813, US9302836, US9193136, US9090383, US8920589, US8522978, US8408793, US8361615, US8187407, US7967510, US7914638, US2014174646, US2012318703, US2011192738, US2011011527, US2009001143, US2008314465, US2008292225, US2008128416, US2008037913, US2008037912, US2007228040, KR101498311, EP2470442, EP2470441, EP2050690, EA025804,

Abstract:
Source: US2005050851A There is described a method for wrapping an article using a web of packaging film having at least one tar line thereon in the MD, the method comprising the steps of: (a) forming at regular intervals in the MD a tab on the film, the tab having a free end connected by free sides to an opposite end of the tab attached to the film, the tab being positioned on the film so the axis of at least one tear line in the MD passes through both ends of the tab; (b) severing the film web to form sheets by cutting substantially along an axis across the TD of the web, the axis passing across the tab between its ends, where the tab along said axis is not substantially severed there through so the tab protrudes from the leading edge of the sheet; (c) wrapping a sheet formed from step (b) around an article to form a tube with the cut sides of the sheet overlapping, where the free end of the tab lies on the top of the overlap on the outside of the tube and where the cut sides of the sheet overlap at least to the extent that the tab in the film on the top surface overlaps with film underneath, and (d) sealing the film together within the overlap region by a sealing means which: (i) seals more strongly in the overlap region outside a tear line region inside the overlap, where the tear line region is defined by the cut edges of the overlap region (ex TD) and a pair of axes parallel to the non−cut sides of the film sheet (ex MD) each axis passing through the respective widest points of the side of the tab; so the free end of the tab is either unsealed or only weakly sealed to the film; and (e) wrapping the ends of the tube around the article and sealing the ends to form a sealed package around the article, the package readily openable by pulling the free tab end to initiate tearing along the tear line. Packaging (such as cigarette cartons) wrapped with films by this method are also described.

0) US2005194402A – COMPACT ELECTRONIC POUR SPOUT ASSEMBLY

34) Family number: 32217792 (US2005194402A) © PatBase

Title: COMPACT ELECTRONIC POUR SPOUT ASSEMBLY

Priority: US20040551191P 20040308 US20040795720 20040308 US20050592098 20050308 US20050650295P 20050203 US20050705885P 20050805 US20050906646 20050228 US20050650307P 20050203 US20050906634 20050228 US20050650304P 20050203 US20060339965 20060125 US20060339911 20060125 WO2005US07575 20050308 US20050906647 20050228 US20050906806 20050308

Family:

Publication number	Publication date	Application number	Application date
EP1738336 A2	20070103	EP20050724988	20050308
EP1738336 A4	20080611	EP20050724988	20050308
US2005194402 AA	20050908	US20050906647	20050228
US2005195081 AA	20050908	US20040795720	20040308
US2005195082 AA	20050908	US20050906806	20050308
US2005195091 AA	20050908	US20050906646	20050228
US2005197738 AA	20050908	US20050906634	20050228
US2006214441 AA	20060928	US20060339965	20060125
US2006218886 AA	20061005	US20060339911	20060125
US2007188338 AA	20070816	US20050592098	20050308
US7088258 BB	20060808	US20050906646	20050228
US7109863 BB	20060919	US20050906806	20050308
US7190278 BB	20070313	US20040795720	20040308
US7293810 BB	20071113	US20060339965	20060125
US7296391 BB	20071120	US20060339911	20060125
US7573395 BB	20090811	US20050906634	20050228
US7598883 BB	20091006	US20050592098	20050308
WO05086788 A2	20050922	WO2005US07479	20050308
WO05086788 A3	20060831	WO2005US07479	20050308
WO05086789 A2	20050922	WO2005US07481	20050308
WO05086789 A3	20061221	WO2005US07481	20050308
WO05086811 A2	20050922	WO2005US07575	20050308
WO05086811 A3	20060427	WO2005US07575	20050308
WO06084029 A1	20060810	WO2006US03675	20060201

Probable Assignee: NUVO HOLDINGS LLC

Assignee(s):(std): KOMAR EUGENE R ; LOPOUKHINE MATTHEW ; MORRISON CHRISTOPHER S ; NUVO HOLDINGS L L C ; NUVO HOLDINGS LLC ; STUDNICKI ADAM A ; SGS TECHNOLOGIES L L C ; SGS TECHNOLOGIES LLC

Assignee(s): POUR ONE LLC ; WILDEN CO LLC ; GINJOINT LLC ; NUVO TECHNOLOGIES INC

Inventor(s):(std): KOMAR EUGENE R ; LOPOUKHINE MATTHEW ; MORRISON CHRISTOPHER S ; STUDNICKI ADAM A

Inventor(s): STUDNICKI ADAM ; MORRISON CHRISTOPHER ; KOMAR EUGENE

Agent(s): LOWELL W GRESHAM MESCHKOW AND GRESHAM PLC; MESCHKOW AND GRESHAM PLC; JOHN A MIZHIR JR SUITE 201; JOHN A MIZHIR JR; LOWER W GRESHAM, MESCHKOW AND GRESHAM; LOWER W GRESHAM MESCHKOW AND GRESHAM; LOWELL W; JORDAN M; GOURI G

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US

UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A01K29/00 B65B9/02 B65B9/06 B65D5/66 B67B7/00 B67D7/22 G01C17/00 G01C9/06 G01C9/10 G01F11/00 G06F17/00 G08B1/08 G08B13/14 G08B13/24 G08B21/00 H01H35/02 H04Q9/00 (Advanced/Invention); B67D1/00 H01H1/16 H01H1/60 (Advanced/Non–invention); A01K29/00 B65B9/00 B65B9/06 B65D5/64 B67B7/00 B67D7/22 G01F11/00 G06F17/00 G08B1/00 G08B21/00 H04Q9/00 (Core/Invention); B67D1/00 (Core/Non–invention)

International class (IPC 1–7): B65D5/66 B67B7/00 G01F11/00 G06F17/00 G08B1/08 G08B21/00

CPC: G01C9/06 G01C9/10 G01C2009/068 G01C2009/107 H01H1/16 H01H1/60 H01H35/02 B65D51/248 B67D2210/00091 G01F13/006 G08B13/149 G08B13/2402 B65B9/026 B65F1/062 B65F2210/167 B65F2240/132 E01H1/1206 E01H2001/128 E01H2001/1286 E01H2001/1293 B65D47/06 G01D9/005 G01K1/022 G01P1/127 G01C9/00 H04Q9/00

European class: B65B9/02C B65D47/06 B65D51/24K B65F1/06B E01H1/12B G01C9/00 G01C9/06 G01C9/10 G01D9/00S G01F13/00C G01K1/02B G01P1/12C G08B13/14P G08B13/24B H01H35/02 H04Q9/00 L65F210/167 L65F240/132 L67D210/00D8H P01H1/12F30 P01H1/12F30U P01H1/12F40 S01C9/06R S01C9/10S T01H1/16 T01H1/60

US class: 222/113 294/1.4 294/14 294/86.4 33/365 33/365S 340/429 340/539.22 340/539.220 340/539.26 340/539.260P 340/545.5 340/568.1 340/571 340/572.1 340/572.7 340/572.700S 340/572.8 340/572.800S 340/612 340/612S 340/686.1 340/689 340/689P 343/741 53/550 53/550P 53/553 700/231 702/150 702/150S 73/61.52 73/61.520S

Classification Explorer

Cited documents: USRE31434 E, USD386350 S1, USD352265 S1, US929960 A, US7109863 BB, US7077172 BB, US6970141 BB, US6970141 BA, US6925781 BA, US6901974 BB, US6800841 BA, US6742678 BA, US6736436 BA, US6719194 BB, US6718311 BA, US6706978 BB, US6706978 BA, US6662976 BB, US6630635 BA, US6616037 BB, US6567050 BA, US6559396 BA, US6554337 BB, US6522308 BA, US6518877 BA, US6518523 BA, US6516588 BB, US6507251 BB, US6504481 BB, US6504481 BA, US6480110 BB, US6480110 BA, US6450406 BB, US6442855 BB, US6442855 BA, US6427871 BA, US6409046 BA, US6407669 BA, US6366829 BA, US6354468 BA, US6341428 BA, US6339199 BA, US6323446 BA, US6321934 BA, US6298972 BA, US6230944 BA, US6198059 BA, US6172357 BA, US6172357 B1, US6145283 A, US6123225 A, US6104354 A, US6092726 A, US6086123 A, US6082587 A, US6067052 A, US6036055 A, US6028275 A, US6027027 A, US6016476 A, US6005205 A, US5995054 A, US5988859 A, US5987988 A, US5986219 A, US5973650 A, US5955713 A, US5937528 A, US5931343 A, US5930766 A, US5923263 A, US5916425 A, US5900602 A, US5886647 A, US5838798 A, US5820179 A, US5813200 A, US5808254 A, US5799836 A, US5790385 A, US5774865 A, US5745036 A, US5731981 A, US5702032 A, US5682142 A, US5669147 A, US5664113 A, US5659482 A, US5639999 A, US5627316 A, US5619915 A, US5603430 A, US5597066 A, US5590512 A, US5543767 A, US5511694 A, US5507411 A, US5507182 A, US5469180 A, US5469178 A, US5460710 A, US5457293 A, US5454406 A, US5430532 A, US5422650 A, US5410701 A, US5410113 A, US5406256 A, US5397027 A, US5386214 A, US5379916 A, US5373153 A, US5343766 A, US5335952 A, US5326143 A, US5303910 A, US5295611 A, US5285033 A, US5255819 A, US5252795 A, US5245869 A, US5211318 A, US5153394 A, US5136127 A, US5072861 A, US5072233 A, US5056842 A, US5037149 A, US5025246 A, US5007560 A, US5006676 A, US4999968 A, US4997012 A, US4996819 A, US4961533 A, US4892236 A, US4891755 A, US4884067 A, US4869049 A, US4866850 A, US4833281 A, US4765666 A, US4751353 A, US4736871 A, US4736223 A, US4736207 A, US4686335 A, US4660742 A, US4658357 A, US4653322 A, US4647937 A, US4628160 A, US4603540 A, US4591676 A, US4584885 A, US4578013 A, US4563739 A, US4547972 A, US4530067 A, US4497118 A, US4450326 A, US4436223 A, US4433795 A, US4411351 A, US4349224 A, US4278854 A, US4278186 A, US4276999 A, US4265370 A, US4253691 A, US4200319 A, US4196429 A, US4168410 A, US4162028 A, US4148510 A, US4135067 A, US4119337 A, US4074505 A, US4067173 A, US4056278 A, US3935701 A, US3920149 A, US3863724 A, US3845883 A, US3777708 A, US3748415 A, US3742478 A, US3733447 A, US3733098 A, US3688947 A, US3599833 A, US3428218 A, US3257034 A, US3170597 A, US2938318 A, US2936163 A, US2828590 A, US2826025 A, US2747351 A, US2612738 A, US2443327 A, US2420983 A, US2350930 A, US2006218886 AA, US2006214441 AA, US2005092389 AA, US2004232227 AA, US2004210405 AA, US2004124192 AA, US2004084290 AA, US2003110652 AA, US2003071725 AA, US2003055589 AA, US2003034392 AA, US2002035524 AA, US2001007982 AA, US1331872 A, JP1279006 A2, JP1182800 A2, JP11023268 A2, FR2631212 A1, DE3129424 A1, DE10158416 C1,

Forward Citations:

WO15028799, WO12175693, USD649897, USD649896, USD649895, USD649894, USD649486, USD649078, USD561618, US9617140, US9596733, US9586802, US9576267, US9533870, US9516960, US9485549, US9481559, US9458608, US9434597, US9302826, US9221667, US9212041, US9156672, US9082103, US9022257, US9015071, US9004320, US8967688, US8786437, US8783512, US8765511, US8691610, US8573500, US8482399, US8462062, US8458312, US8424721, US8286328, US8196980, US8164454, US7864113, US7768396, US7665670, US7584119, US7492256, US7318656, US7296391, US7293810, US7260666, US7225043, US2017147970, US2016023804, US2015266715, US2015186196, US2014367411, US2014263461, US2014263422, US2014233215, US2014152033, US2014149265, US2013314244, US2013043735, US2012268017, US2011309103, US2011180563, US2011120628, US2010332273, US2010318221, US2010268560, US2010141435, US2010085194, US2009273489, US2009157515, US2009140837, US2008272923, US2008272147, US2008235100, US2008235099, US2008235098, US2008235097, US2008091637, US2008088441, US2007262868, US2007239549, US2007228068, US2007188302, US2007152841, US2007120701, US2007069862, US2007068208, US2007028023, US2006250308, US2006218886, US2006214441, US2006179795, US2005267611, US2005258260, US2005194402, KR20110063820, KR101694557, ITMI20130863, GB2505150, CN102556551,

Abstract:
Source: US2005194402A A compact electronic pour spout assembly (**22**) includes a pour spout (**28**) and a shell (**30**) locked together by a resilient sealing member (**42**). A neck (**64**) of the sealing member (**42**) is inserted into an opening (**36**) through the shell (**30**), and pour spout (**28**) is inserted into the neck (**64**) to expand the neck (**64**), locking the three components in place. A small, non−replaceable battery (**84**) is permanently sealed in the shell (**30**). Mount detection switches (**90**) are located on opposing sides of the opening (**36**) from the battery (**84**). Light (**150**) emitted from one side of a printed wiring board (**73**) is guided through an inner shell (**122**) and visible in several directions outside of the shell (**30**).

0) US2001014246A – SECURE PRINTER SYSTEM FOR GAMING DEVICES

35) Family number: 30112950 (US2001014246A) © PatBase

Title: SECURE PRINTER SYSTEM FOR GAMING DEVICES

Priority:

US19980111062P	19981204	US19990153195P	19990910	US19990454903	19991203
US19990420221	19991016	US19990419748	19991016	US19990420222	19991016
US20000728170	20001201	US20000181576P	20000210	US20010784237	20010213
US20000596650	20000619	US20000659766	20000911	US20010784237	20010214
US20010332306P	20011120	US20020090115	20020227	US20020281929	20021028
US20100969196	20101215	US20030661142	20030912	US20030661335	20030912
US20030661845	20030912	US20020301430	20021120	US20050038963	20050120
US20130838295	20130315				

Family:

Publication number	Publication date	Application number	Application date
US2001014246 AA	20010816	US20000728170	20001201
US2001041610 AA	20011115	US20010784237	20010214
US2002043546 AA	20020418	US19990419748	19991016
US2002146271 AA	20021010	US20020090115	20020227
US2003092477 AA	20030515	US20020301430	20021120
US2005129449 AA	20050616	US20050038963	20050120
US2011086691 AA	20110414	US20100969196	20101215
US2013217459 AA	20130822	US20130838295	20130315
US6443642 BA	20020903	US19990420222	19991016
US6500067 BA	20021231	US19990420221	19991016
US6652380 BA	20031125	US19990454903	19991203
US6679775 BA	20040120	US20020281929	20021028
US6685559 BB	20040203	US20010784237	20010214
US6758393 BA	20040706	US20000659766	20000911
US6814518 BB	20041109	US20000728170	20001201
US6857804 BB	20050222	US20020090115	20020227
US6908384 BA	20050621	US20030661142	20030912
US6916246 BA	20050712	US20030661335	20030912
US7077747 BA	20060718	US20030661845	20030912
US7314324 BB	20080101	US20050038963	20050120
US7497362 BB	20090303	US19990419748	19991016
US7862418 BB	20110104	US20020301430	20021120
US8444468 BB	20130521	US20100969196	20101215

Probable Assignee: BALLY GAMING INC

Assignee(s):(std)**:** BALLY GAMING INC ; WHITE WARREN R ; BRYAN RAYMOND G ; SIERRA DESIGN GROUP ; BRADFORD RUSS T ; LUCIANO JR ROBERT ANTHONY

Assignee(s): BANK OF AMERICA NA ADMINISTRATIVE AGENT AS ; SHFL ENTERTAINMENT INC ; ARCADE PLANET INC ; SIERRA DESIGN GROUP PO BOX ; LUCIANO ROBERT A ; BALLY GAMING INT INC ; BALLY TECHNOLOGIES INC

Inventor(s):(std)**:** ANDERSON ROBERT S ; BRYAN RAYMOND G ; KELLEY TIMOTHY F ; LUCIANO ROBERT A ; LUCIANO ROBERT A JR ; SPENCER KURT W ; WHITE WARREN R ; LUCIANO JR ROBERT ANTHONY ; SOUZA MICHAEL J ; BRADFORD RUSS T ; LUCIANO JR ROBERT A ; BRANDFORD RUSS T

Inventor(s): SPENCER KURT ; LUCIANO ; JR ROBERT A ; LUCIANO ROBERT AJR ; SOUZA MICHAEL ; LUCIANO ROBERT ; KELLEY TIMOTHY ; ANDERSON ROBERT

Agent(s): BROWN RAYSMAN MILLSTEIN FELDER AND STEINER LLP; IAN F; MARSDEN RUSS F; RUSS F; STEPTOE AND JOHNSON LLP; BURNS IAN F; ELLSWORTH ADAM C; HEIN MARVIN A; MARVIN A; ADAM C; DAVID N; ROLANDO J

International class (IPC 8–9): A63F13/00 A63F9/24 B26F3/00 B26F3/02 B41J29/02 B41J29/12 B65H35/10 G06F17/00 G06F19/00 G07F17/32 G07F9/00 (Advanced/Invention); A63F3/08 (Advanced/Non–invention); B26F3/00 B26F3/02 B41J29/02 B41J29/12 B65H35/00 (Core/Invention)

International class (IPC 1–7): A63F13/00 A63F9/00 A63F9/24 B26F3/00 B41J29/02 B41J29/12 B41J3/36 G06F17/00 G06F17/60 G07F9/00

CPC: G07F17/3232 G07F17/3241 G06Q20/20 G06Q20/0457 G07F11/002 G07F17/42 G07F17/3255 G07F17/3258 G07F17/3225 G07F17/3251 G07F17/3269 Y10T225/30 Y10T225/321 Y10T225/329 Y10T225/35 Y10T225/393 B26F3/002 A63F3/081 B26F3/02 B41J29/02 B41J29/12 B65H35/10 G07F17/32 G07F17/3223 G07F17/3248

European class: A63F9/24 B26F3/00B B26F3/02 B41J29/02 B41J29/12 B65H35/10 G06Q20/0457 G06Q20/20 G07F11/00B G07F17/32 G07F17/32C6 G07F17/32E6 G07F17/32H G07F17/32K4 G07F17/42 K63F3/08E

US class: 225/100 225/106 225/93 225/96 225/97 235/379 273/138.1 273/138A 273/139 273/142.00B 273/142B 273/274 347/108 347/152 381/1 381/61 400/578 400/691 400/691P 400/692 400/693 400/693P 400/88 434/185 463/12 463/16 463/16P 463/17 463/18 463/19 463/20 463/23 463/25 463/26 463/27 463/29 463/30 463/35 463/42 463/43 70/51.6 704/270 705/16 902/18 902/22 902/23 902/30 902/31 902/36

Locarno class: 22/51

Classification Explorer

Cited documents: WO9416781 A1, WO9401678 A1, WO9401678, WO0232520 A1, US7156738 BB, US7008320 BB, US6892182 BA, US6857959 BA, US6840860 BA, US6652380 BA, US6500067 BA, US6443840 BB, US6443642 BA, US6435407 BA, US6394907 BA, US6385591 BA, US6340331 BA, US6328149 BA, US6312333 BA, US6296101 BA, US6280326 BA, US6278472 BA, US6257475 BA, US6244958 BA, US6230928 BA, US6227972 BA, US6215028 BA, US6178408 BA, US6178408 B1, US6125028 A, US6110044 A, US6089982 A, US6088222 A, US6076555 A, US6065673 A, US6061660 A, US6056289 A, US6048269 A, US6047807 A, US6042285 A, US6030133 A, US6015344 A, US6012832 A, US6009412 A, US6007426 A, US5984177 A, US5983196 A, US5969324 A, US5969319 A, US5953709 A, US5949042 A, US5944606 A, US5941771 A, US5928082 A, US5919091 A, US5916024 A, US5882258 A, US5833104 A, US5816918 A, US5788348 A, US5785328 A, US5759101 A, US5743799 A, US5713795 A, US5707285 A, US5697844 A, US5687545 A, US5655966 A, US5628684 A, US5624066 A, US5593149 A, US5584362 A, US5508731 A, US5505551 A, US5495972 A, US5489773 A, US5483047 A, US5442567 A, US5412193 A, US5371348 A, US5356231 A, US5334821 A, US5326104 A, US5290033 A, US5283734 A, US5277424 A, US5265874 A, US5256863 A, US5249800 A, US5249044 A, US5239165 A, US5227874 A, US5180232 A, US5158293 A, US5135224 A, US5133615 A, US5076555 A, US5057915 A, US5039242 A, US5010485 A, US4946086 A, US4881839 A, US4865241 A, US4764666 A, US4673932 A, US4618085 A, US4454973 A, US4283709 A, US4265552 A, US4157829 A, US3727814 A, US2803304 A, US2778424 A, US2252733 A, US2007021198 AA, US2003228898 AA, US2002151359 AA, US2002142825 AA, US2002103027 AA, US2002098888 AA, US2002077178 AA, US2002039921 AA, US2001053712 AA, US2001034266 AA, US2001003099 AA, JP9153916, JP11153916 A2, JP11003441 A2, DE4344973 A1,

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US2004092307, US2004092306, US2004092304, US2004092303, US2004082386, US2004058728, US2004048648, US2004034440, US2004033095, US2004029635, US2004023721, US2003171145, US2003166412, US2003162591, US2003162588, US2003144053, US2003092477, US2003087691, US2003073495, US2003045354, US2003040356, US2003036427, US2003032473, US2003014634, US2003013516, US2003008707, US2003008706, US2002187834, US2002177480, US2002177479, US2002113124, US2002107731, US2002098888, US2002007316, FR2911709, EP2043749, EP2043749, CN103568604, CN103568604, AU2010257432, AU2008203189, AU2006234980, AU2006234980, AU2006201826, AU2002366161,

Abstract:
Source: US2001014246A A modular printer system comprising a support frame, a chassis, a media holder, and a printer assembly. The support from supports the other components and may be attached to other devices. The chassis is slidably attached to the support frame so that it may be at least partially removed from the support frame thereby exposing components attached to the chassis. The chassis is adapted to hold the media holder and the printer assembly. The media holder holds media that may be printed on by the printer assembly. The printer assembly may be removed from the chassis to service the printer assembly and give full access to the media path. The printer assembly comprises a printer for printing on the media and a controller for controlling the printer and communicating with other devices.

0) US2012211526A – CONTAINERS HAVING PERFORATED SHRINK WRAP SLEEVE...

36) Family number: 50665214 (US2012211526A) © PatBase

Title: CONTAINERS HAVING PERFORATED SHRINK WRAP SLEEVES

Priority: AU20110292173 20110815 AU20160202329 20160413 US20100374027P 20100816 US20120460633 20120430 US20130946896 20130719 NZ20110606983 20110815 WO2011US47750 20110815

Family:

Publication number	Publication date	Application number	Application date
AR082697 AA	20121226	AR2011P102967	20110815
AU2011292173 AA	20120223	AU20110292173	20110815
AU2011292173 AH	20130321	AU20110292173	20110815
AU2011292173 BB	20160211	AU20110292173	20110815
AU2016202329 AA	20160505	AU20160202329	20160413
BR112013003619 A2	20160823	BR20131103619	20110815
CA2807777 AA	20130207	CA20112807777	20110815
CN103619717 A	20140305	CN201180050016	20110815
EP2605977 A1	20130626	EP20110746135	20110815
EP2605977 B1	20170510	EP20110746135	20110815
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JP6117100 B2	20170419	JP20130524908T	20110815
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NZ705399 A	20160624	NZ20110705399	20110815
RU2013106422 A	20140927	RU20130106422	20110815
RU2608276 C2	20170117	RU20130106422	20110815
SG187874 A1	20130328	SG20130011630	20110815
US2012211526 AA	20120823	US20120460633	20120430
US2013299516 AA	20131114	US20130946896	20130719
US8511472 BB	20130820	US20120460633	20120430
WO12024218 A1	20120223	WO2011US47750	20110815

Probable Assignee: KRAFT FOODS GROUP BRANDS LLC

Assignee(s):(std)**:** DE CLEIR PIARAS VALDIS ; DUPUIS GLEN A ; KRAFT FOODS GLOBAL BRANDS LLC ; KRAFT FOODS GROUP BRANDS LLC ; KRAFT FUDS GRUP BRENDS LLK ; LUCISANO KATHERINE

Inventor(s):(std)**:** CLEIR PIARAS VALDIS DE ; DE CLEIR PIARAS VALDIS ; DUPUIS GLEN A ; LUCISANO KATHERINE ; LUSIZANO KETRIN ; DE KLEIR PIARAS VALDIS

Inventor(s): PIARAS VALDIS DE CLEIR ; GLEN A DUPUIS ; KATHERINE LUCISANO

Agent(s): GRIFFITH HACK; SIM AND MCBURNEY; AIRD AND BERLIS IP PARTNERSHIP LTD; BUCKS TERESA ANNE; BOULT WADE TENNANT; TANI AND ABE PC; FITCH EVEN TABIN AND FLANNERY LLP; KRATZ RUDY ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D23/08 B65D25/34 B65D25/36 B65D37/00 B65D43/16 B65D55/06 B65D55/08 B65D65/00 B65D65/28 B65D71/08 B65D75/00 B65D75/60 B65D75/62 (Advanced/Invention)

CPC: B65D55/0854 B65D23/0878 B65D75/002

European class: B65D23/08D5 B65D55/08B3 B65D75/00B

US class: 206/497 222/153.06 222/206

Classification Explorer

Cited documents: WO9511168 A1, WO0048161 A2, USD657682 S1, USD650686 S1, USD650679 S1, USD644106 S1, USD638715 S1, USD638714 S1, USD638713 S1, USD637916 S1, USD636267 S1, USD629303 S1, USD628490 S1, USD628488 S1, USD624424 S1, USD614488 S1, USD610022 S1, USD609098 S1, USD608648 S1, USD608645 S1, USD605945 S1, USD605512 S1, USD602356 S1, USD601899 S1, USD598752 S1, USD595138 S1, USD592957 S1, USD591599 S1, USD590259 S1, USD588462 S1, USD588461 S1, USD588460 S1, USD588459 S1, USD587117 S1, USD585742 S1, USD585741 S1, USD585740 S1, USD585290 S1, USD585289 S1, USD584159 S1, USD581794 S1, USD581279 S1, USD580767 S1, USD579338 S1, USD578399 S1, USD578007 S1, USD577593 S1, USD577592 S1, USD574246 S1, USD565959 S1, USD563789 S1, USD563226 S1, USD554515 S1, USD547190 S1, USD544351 S1, USD543861 S1, USD543115 S1, USD542141 S1, USD542140 S1, USD540176 S1, USD539652 S1, USD538668 S1, USD537721 S1, USD536975 S1, USD529812 S1, USD529811 S1, USD529810 S1, USD529388 S1, USD528004 S1, USD527644 S1, USD527640 S1, USD526204 S1, USD525873 S1, USD525872 S1, USD525136 S1, USD520873 S1, USD510029 S1, USD498415 S1, USD486398 S1, USD486065 S1, USD482286 S1, USD481636 S1, USD471819 S1, USD471818 S1, USD463747 S1, USD463744 S1, USD459659 S1, USD457437 S1, USD447953 S1, USD438459 S1, USD435098 S1, USD427073 S1, USD419455 S1, USD413265 S1, USD391855 S1, USD387673 S1, USD382803 S1, USD349058 S1, USD349057 S1, USD347389 S1, USD336614 S1, USD332749 S1, USD322220 S1, USD320746 S1, USD317869 S1, USD316369 S1, USD31399 S1, USD308824 S1, USD292882 S1, USD282441 S1, USD265060 S1, USD240829 S1, USD206686 S1, USD202662 S1, USD169642 S1, USD139331 S1, US7661352 BB, US7314150 BB, US7147131 BB, US6955000 BB, US6837405 BB, US6783035 BB, US6779689 BB, US6746744 BA, US6663019 BB, US6598808 BA, US6460781 BA, US6385878 BA, US6296129 BA, US5605230 A, US5524759 A, US5511664 A, US5375718 A, US5315785 A, US5292018 A, US5038974 A, US5025981, US4976798 A, US4903843 A, US4903843, US4758456 A, US4538740 A, US4358032 A, US4124151 A, US4000824 A, US3873018 A, US3746201 A, US3733002 A, US3733002, US3189208 A, US2954139 A, US2011204049 AA, US2010224646 AA, US2008035674 AA, US2007253761 AA, US2007102455 AA, US2007084735 AA, US2007023453 AA, US2005258131 AA, US2005035081 AA, RU2294873, JP2010070243 A2, JP2010070243, JP2009126524 A2, JP2009126524, JP2005247371 A2, JP2005247371, JP2004219621 A2, JP2004219621, JP2002541498 T2, JP2002541498, CN2709350 Y, CN2637367 Y, CN1863711 A, CN101522535 A,

Forward Citations: WO16079663, WO15193670, USD784143, USD766088, USD764296, USD757557, USD755054, USD755053, USD749955, USD749421, USD743809, USD741182, USD738732, USD737684, USD720622, USD693690, US9637272, US8945083, US8603557, US2016325895, US2013240564, US2013075430, US2011240501, CN105564807,

Abstract:
Source: US2012211526A A container having a container body that can have a circumference/perimeter variation along a vertical axis, a bottom surface, and a container opening having a top surface; an axially oriented shrink wrap sleeve covering a portion of the body of the container having a circumference variation and the container opening; the shrink wrap sleeve having a pair of generally vertical perforations descending from the shrink wrap top edge towards a circumferential perforation ring oriented below the container opening. The axially oriented shrink wrap sleeve covering a portion of the container body circumference variation has a greater or lesser circumference at at least one point between the perforation ring and the bottom edge of the shrink wrap.

0) WO07007102A2 – FANCIFUL ENDS FOR CANS EXTREMITES FANTAISIE PO...

37) Family number: 32258761 (WO07007102A2) © PatBase

Title: FANCIFUL ENDS FOR CANS

Priority: GB20050014343 20050713 GB20060009568 20050713 GB20060009568 20060513

Family:

Publication number	Publication date	Application number	Application date
GB200514343 A0	20050817	GB20050014343	20050713
GB200609568 A0	20060621	GB20060009568	20050713
GB2428659 A1	20070207	GB20050014343	20050713
GB2428659 B2	20071121	GB20050014343	20050713
GB2428668 A1	20070207	GB20060009568	20050713
GB2428668 B2	20080723	GB20060009568	20050713
WO07007102 A2	20070118	WO2006GB02583	20060712
WO07007102 A3	20070503	WO2006GB02583	20060712

Probable Assignee: REXAM BEVERAGE CAN EUROPE LTD

Assignee(s):(std)**:** BONNER ANN ; REXAM BEVERAGE CAN EUROP LTD ; REXAM BEVERAGE CAN EUROPE LTD

Assignee(s): REXAM BEVERAGE CAN EUROPE LIMITED

Inventor(s):(std)**:** BONNER ANN

Inventor(s): ANN BONNER

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/38 B21D51/44 B65D17/28 B65D17/32 B65D17/34 B65D51/24 (Advanced/Invention); B21D51/38 B65D17/28 B65D51/24 (Core/Invention)

CPC: B21D51/38 B65D17/165 B65D2203/00 B65D2517/0014 B65D2517/0052 B65D81/365 B21D51/44 B65D17/16 B21D51/443 B65D51/245

European class: B21D51/38 B21D51/44 B21D51/44B B65D17/16 B65D17/16B2 B65D51/24F B65D81/36D L65D203/00 L65D517/00Y2C L65D517/00Y6B

Classification Explorer

Cited documents: WO9958407 A1, WO9909853 A2, WO05021392 A1, WO0168460 A2, US6659833 BA, US6533518 BA, US6053349 A, US2001011431 AA, JP2002128087 A2, GB2347370 A1,

Forward Citations: WO17027802, WO13158771, WO13049313, WO08125238, US9637267, US9340368, US9278776, US9259913, US9187221, US9186924, US2015034649, DE102012209500, CN103946119,

Abstract:
A can is described having a can body comprising a sidewall and a base and defining an interior region for containing a product. The can includes an end having a center panel. A printing is applied over a substantial area extent of the center panel. In one embodiment, the printing comprising an illustration of head and facial features of a character. In preferred embodiments, the end may further comprise a scored portion in the center panel for defining an opening in the end and a manually manipulable tab secured to the end. The tab forms the nose of the character. The character may include the face and head of a real person, or, alternatively, may depict a fictional character or a cartoon character. Other embodiments are described in the printing takes the form of a sports scene with a ball such as a soccer or golf ball printed within a score portion defining a pour panel.

38) Family number: 10320236 (US5980922A) © PatBase

Title: CLEANING ARTICLES TREATED WITH A HIGH INTERNAL PHASE INVERSE EMULSION

Priority: US19960640268 19960430 US19960759547 19961205 WO1997US06905 19970425

Family:

Publication number	Publication date	Application number	Application date
AR006913 AA	19990929	AR1997P101778	19970430
AU199728106 A1	19971119	AU19970028106	19970425
AU725252 B2	20001012	AU19970028106	19970425
BRPI9709204 A	19990810	BR1997PI09204	19970425
CA2253357 AA	19981027	CA19972253357	19970425
CA2253357 C	20020806	CA19972253357	19970425
CL1997000777 A1	19980123	CL19970000777	19970429
CN1133419 C	20040107	CN19971095983	19970425
CN1223571 A	19990721	CN19971095983	19970425
CO4930343 A1	20000627	CO19970022509	19970428
CZ287999 B6	20010314	CZ19980003476	19970425
CZ9803476 A3	19990317	CZ19980003476	19970425
EG21962 A	20020430	EG19970000351	19970429
EP0910337 A1	19990428	EP19970922444	19970425
HU9902467 AB	19991129	HU19990002467	19970425
HU9902467 AC	20000728	HU19990002467	19970425
ID19080 A	19980611	ID19970001436	19970430
IL126789 A0	19990817	IL19970126789	19970425
IL126789 A1	20030312	IL19970126789	19970425
IN01053DE1997 A	20160831	IN1997DE01053	19970424
JP11508610 T2	19990727	JP19970539029T	19970425
JP3353901 B2	20021209	JP19970539029T	19970425
KR100301651 B1	20020917	KR19980708761	19981030
KR20000065153 A	20001106	KR19980708761	19981030
MY116404 A	20040131	MY19970001855	19970429
NO985021 A	19981230	NO19980005021	19981028
NO985021 A0	19981028	NO19980005021	19981028
PE82398 A1	19981214	PE19970000329	19970430
TH27957 A	19980216	TH19971001617	19970428
TR9802167 T2	20010621	TR19980002167T	19970425
TW368536 B	19990901	TW19970105574	19970428
US5980922 A	19991109	US19960759547	19961205
VN2876 A1	20020826	VN19980000920	19981031
WO9740814 A1	19971106	WO1997US06905	19970425
ZA9703576 A	19980130	ZA19970003576	19970424

Probable Assignee: PROCTER AND GAMBLE CO

Assignee(s):(std)**:** PROCTER AND GAMBLE ; PROCTER AND GAMBLE CO CINCINNA

Assignee(s): THE PROCTER AND GAMBLE COMPANYUS ; THE PROCTER AND GAMBLE CO CINCINNATI OHIO ; TROKHAN PAUL DENNIS ; PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE COMPANY ; PROCTER AND GAMBLE COMPANY ; THE PROCTER AND GAMBLE CO ; PROCTER AND GAMBLE CO THE ; HIRD BRYN ; MACKEY LARRY NEIL

Inventor(s):(std): BRYN HIRD ; DENNIS TROKHAN PAUL ; HIRD BRYN ; HIRD BRYN NMN ; MACKEY LARRY N ; MACKEY LARRY NEIL ; MACKEY LARRY NIEL ; NEIL MACKEY LARRY ; NMN HIRD BRYN ; TROKHAN PAUL D ; TROKHAN PAUL DENNIS

Inventor(s): Bryn ; PAUL D TROKHAN ; Paul Dennis ; PAUL DENNIS TROKHAN ; Trokhan ; MACKEY LARRY NELL ; LARRY N MACKEY ; Larry Neil ; LARRY NEIL MACKEY ; Mackey ; Hird ; BRYN NMN HIRD

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; SIM AND MCBURNEY; HARNECKER; CARLOS REINALDO OLARTE GARCIA; REINHOLD COHN AND PARTNERS

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CH CN CU CZ DE DK EE ES FI FR GB GE GH GR HU IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG UZ VN YU

International class (IPC 8–9): A01N25/34 A61F13/15 A61K7/00 A61K7/50 A61K8/00 A61K8/02 A61K8/06 A61K8/31 A61K8/36 A61K8/97 A61K8/98 A61L15/00 A61L15/42 A61Q19/10 C08J3/03 C11D1/06 C11D17/04 D21H19/18 D21H21/14 (Advanced/Invention);
A61K7/50 A61K8/00 A61Q19/10 C08J3/03 (Advanced/Non–invention);
A61F13/15 A61K8/00 A61K8/02 A61K8/04 A61K8/30 A61K8/96 A61L15/00 A61Q19/10 C11D1/02 (Core/Invention);
D21H21/14 (Core/Non–invention)

International class (IPC 1–7): A01N25/34 A47K A47L A61F13/00 A61F13/15 A61K A61K7/00 A61K7/50 A61L A61L15/00 B32B29/00 C08J3/03 C11D1/06 C11D17/04 C23G 5/06 C23G5/06 D21H19/18 D21H21/14

CPC: A61K8/0208 A61K8/06 A61Q19/10 C11D17/049

European class: A61K8/02C A61K8/06 A61Q19/10 C11D17/04F

US class: 424/402 424/404 424/443

Classification Explorer

Cited documents: WO9634035 A1, WO9624329 A1, WO9614835 A1, WO9516824 A1, WO9402120 A1, WO8703613 A2, US5635279 A, US5534326 A, US5525345 A, US5503715 A, US5482703 A, US5470551 A, US5387417 A, US5378455 A, US5362482 A, US5292503 A, US5277761 A, US5247044 A, US5245025 A, US5210102 A, US5162378 A, US5136068 A, US5133972 A, US5047175 A, US5021405 A, US4875927 A, US4853474 A, US4844756 A, US4801447 A, US4782095 A, US4708753 A, US4698178 A, US4606913 A, US4520160 A, US4514345 A, US4513051 A, US4481243 A, US4468254 A, US4446051 A, US4421656 A, US4385049 A, US4381241 A, US4377649 A, US4339276 A, US4293611 A, US4246423 A, US4203877 A, US4137358 A, US4122029 A, US4117199 A, US4112167 A, US4104403 A, US4082887 A, US4043829 A, US3982993 A, US3965518 A, US3919149 A, US3896807 A, US3847637 A, US3819530 A, US3818533 A, US3231587 A, US3215707 A, US2868824 A, JP59144426 A2, JP5070337 A2, JP3168118 A2, JP2152920 A2, IN155758, GB2113236 A1, GB2055689 A1, GB1059541 A, FR2321389 A1, EP0631774 A1, EP0545002 A1, EP0501791 A2, EP0365160 A2, EP0259034 A2, EP0110678 A2, DE3341770 A1, CA1132908 A1, AU4018095 A1,

Forward Citations: WO9906523, WO9855088, WO9824871, WO9824871, WO14167200, WO12145615, WO12145602, WO12145461, WO12145345, WO05063192, WO02092052, WO02092052, USRE40495, US9642876, US9603360, US9498548, US9394637, US9359585, US9168318, US8986721, US8920823, US8840873, US8834445, US8578543, US8545861, US8495784, US8409593, US8388992, US8357383, US8323252, US8304376, US8147444, US8071524, US8012495, US7846462, US7838004, US7799751, US7776365, US7749545, US7741263, US7722902, US7666448, US7651989, US7629043, US7576047, US7514496, US7470656, US7442288, US7361361, US7169400, US7153498, US6986897, US6936580, US6916776, US6905697, US6860967, US6825158, US6730621, US6716805, US6716514, US6673761, US6340663, US6121165, US2010330211, US2010292118, US2010179081, US2008242645, US2008199420, US2007237807, US2007087041, US2007020358, US2006211652, US2006210692, US2006210688, US2006210621, US2006210609, US2006210517, US2006210516, US2006210514, US2006110432, US2005244352, US2005121054, US2005034255, US2004219848, US2004087460, US2003119705, US2002174500, US2002058633, FR2868948, FR2820976, EP2330081, EP2256182, DE19920839, DE19841798, CN102781481, AU2002342264,

Abstract:
Source: US5980922A The invention relates to articles useful in cleansing, and particularly to wet–like cleansing wipes that are especially useful for hard surface cleaning, and in personal cleansing such as baby wipes and particularly for removal of perianal soils. These articles comprise: a carrier; and an emulsion applied to the carrier.

The emulsion comprises (1) from about 2 to about 60 percent of a continuous solidified lipid phase comprising a waxy lipid material having a melting point of about 30 DEG C. or higher, (2) from about 39 to about 97 percent of an internal polar (e.g., water) phase dispersed in the lipid phase; (3) an effective amount of a non−silicon containing emulsifier, where the emulsifier has a viscosity at 55 DEG C. of greater than about 500 centipoise; and (4) and an optional second emulsifier having a viscosity at 55 DEG C. of less than about 400 centipoise. Because the emulsion comprises a waxy external phase, the internal polar phase is retained in the emulsion until in−use shear pressures break the emulsion, thereby providing desired moisture for cleaning. The invention also relates to a process for making the cleaning articles.

0) US2004094042A – LAYERED DOME CAKE ASSEMBLY

39) Family number: 30572167 (US2004094042A) © PatBase

Title: LAYERED DOME CAKE ASSEMBLY

Priority:
US20020294676 20021115 US20020302903 20021125 US20020330221 20021230
US20030195320 20031210 US20030178855 20030402 US20030365422 20030213
US20030195320F 20031210 US20030178855F 20030402 US20030424764 20030429
US20040916440 20040812 US20040766007 20040129 US20040766007 20040129
US20050039898 20050124 US20040006741 20041208 US20030609653 20030701
WO2003US00923 20030114

Family:

Publication number	Publication date	Application number	Application date
AU2003205114 AA	20040618	AU20030205114	20030114
CA2492298 AA	20050112	CA20032492298	20030114
CN1688208 A	20051026	CN20038020695	20030114
EP1565073 A1	20050824	EP20030703782	20030114
EP1565073 A4	20060719	EP20030703782	20030114
HK1081405 A3	20060519	HK20060101702	20060209
US2004094042 AA	20040520	US20020294676	20021115
US2004094043 AA	20040520	US20030365422	20030213
US2004099148 AA	20040527	US20020330221	20021230
US2004099149 AA	20040527	US20030424764	20030429
US2004099152 AA	20040527	US20020302903	20021125
US2004135059 AA	20040715	US20030609653	20030701
US2004182257 AA	20040923	US20040766007	20040129
US2005005779 AA	20050113	US20040916440	20040812
US2005098046 AA	20050512	US20040006741	20041208
US2005120891 AA	20050609	US20050039898	20050124
US6789466 BB	20040914	US20030424764	20030429
US6840162 BB	20050111	US20020302903	20021125
US6851352 BB	20050208	US20020330221	20021230
US6938540 BB	20050906	US20030609653	20030701
US6973872 BB	20051213	US20030365422	20030213
US7047873 BB	20060523	US20020294676	20021115
US7100498 BB	20060905	US20040916440	20040812
US7150221 BB	20061219	US20040766007	20040129
USD487667 S1	20040323	US20030178855F	20030402
USD516372 S1	20060307	US20030195320F	20031210
WO04047558 A1	20040610	WO2003US00923	20030114
WO04047558 C1	20050526	WO2003US00923	20030114
WO05072124 A2	20050811	WO2005US00011	20050107
WO05072124 A3	20060526	WO2005US00011	20050107
WO06022801 A1	20060302	WO2005US00010	20050107
WO06062527 A1	20060615	WO2005US00012	20050110

Probable Assignee: HEARTLAND VENTURES INC

Assignee(s):(std)**:** FLETCHER MORGAN ; MORGAN FLETCHER

Assignee(s): HEARTLAND VENTURES INC

Inventor(s):(std)**:** FLETCHER MORGAN ; MORGAN FLETCHER

Agent(s): MOFFAT AND CO; JOHN S HALE GIPPLE AND HALE; JOHN S; GIPPLE AND HALE; HALE JOHN S

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A21B3/13 A21C11/00 A23L1/00 A23P1/00 A23P1/10 A47J43/18 A47J43/20 B41B11/54 (Advanced/Invention); A21B3/00 A21C11/00 A23P1/10 A47J43/00 (Core/Invention)

International class (IPC 1–7): A22C7/00 A23D1/00 A23L1/00 A23L11/54 A23P1/00 A47J37/10 A47J43/18 B41B11/54

CPC: A21B3/132 Y10S99/15 Y10S249/01 A21C11/00 A47J43/20 A23P30/10 A21B3/13

European class: A21B3/13 A21B3/13D A21C11/00 A23P1/10B A47J43/20

US class: 249/117 249/117P 249/DIG.1 70/200 99/426 99/426P 99/426S 99/428 99/433 99/439 99/440 99/442 99/448 99/448S 99/449 99/450.1 99/DIG.15 D7/356

Locarno class: 07/02

Classification Explorer

Cited documents: USD490269 S1, USD487667 S1, USD480909, USD477970 S1, US823216 A, US6508166 BA, US5948313 A, US5601012 A, US5528981 A, US5514402 A, US5425527 A, US5400698 A, US5232609 A, US5226352 A, US5191830 A, US5094706 A, US5046633 A, US4812323 A, US4607613 A, US4348949 A, US4296682 A, US4220134 A, US4076207, US3943840 A, US3831507 A, US3545645 A, US3296956 A, US3252683 A, US3141440 A, US3141400 A, US2833654 A, US2678143 A, US2595684 A, US2582801, US2472620 A, US2330410 A, US2309133 A, US2290396 A, US2222112 A, US2156145 A, US2135342 A, US2023120 A, US1852966 A, US1728064 A, US1596342 A, US1596331 A, US1510279 A, US1487906 A, US1219711 A,

Forward Citations: WO14068481, WO14066818, WO14049583, WO11073579, WO11035383, WO09103152, WO09077335, WO07093005, WO05041730, WO05041730, USD760030, USD749890, USD696913, USD686468, USD670451, USD661541, USD654332, USD654331, USD654330, USD654329, USD654328, USD654327, USD651038, USD628443, USD599610, USD562513, USD549871, USD543413, USD536920, USD528352, USD517858, USD517854, USD516372, USD508632, US9635863, US9510699, US9468216, US9205974, US9107521, US9060521, US8940349, US8766148, US8499684, US8459490, US8413837, US8402921, US8348089, US8327757, US8309148, US8245633, US8203107, US8011532, US7998516, US7997439, US7966970, US7895940, US7861886, US7850035, US7703167, US7614518, US7582321, US7517933, US7207459, US6869069, US2015190009, US2015157028, US2015010685, US2014272056, US2014120228, US2014116264, US2013276642, US2013273221, US2012244250, US2012237656, US2012237655, US2012175492, US2012097668, US2012006699, US2011272415, US2011272318, US2011123699, US2011064855, US2010297317, US2009291169, US2009252877, US2009250832, US2009250473, US2009200291, US2009114796, US2009108004, US2008164245, US2008110352, US2008083339, US2007227919, US2007175339, US2007102437, US2007095841, US2007031554, US2006292276, US2006225581, US2006045939, US2006029716, US2006000367, US2005247212, US2005242099, US2005211101, US2005084580, US2005056984, FR3022740, FR2954075, FR2899062, EP2499918, EP1709873, EP1709873, CN105640197, CN102273496, CH704664, AU2012101011,

Abstract:
Source: US2004094042A An apparatus assembly for forming a layered dessert in a predetermined layered dome forming a hemispheric shape including a first mold having a dome shaped bowl with a closed semi−spherical end and an open end, and a ring shaped planar support base secured to said closed end of bowl body. A second mold comprises a circular pan with a flat bottom surface and a curved outer side extending upward from the bottom surface with the area formed by a plane across the top of the curved outer side, the inner surface curved side and the bottom surface forming a section of a sphere. A lip is formed on both molds extending outward from the open end.

40) Family number: 24045856 (US5183201A) © PatBase

Title: CARTON TRAY WITH IMPROVED CORNER CONSTRUCTION AND METHOD OF MAKING

Priority: CA19922083353 19921119 US19910796599 19911122 US19920964870 19921022 US19930086839 19930707 US19930090506 19930712 US19930119656 19930913 US19930010863 19930129 US19920975005 19921112 WO1992US09850 19921119

Family:

Publication number	Publication date	Application number	Application date
AU199331372 A1	19930615	AU19930031372	19921119
CA2083353 AA	19930523	CA19922083353	19921119
EP0572602 A1	19931208	EP19920925243	19921119
JP6504753 T2	19940602	JP19930509446T	19921119
US5183201 A	19930202	US19910796599	19911122
US5242106 A	19930907	US19930010863	19930129
US5265796 A	19931130	US19920975005	19921112
US5267686 A	19931207	US19920964870	19921022
US5383596 A	19950124	US19930090506	19930712
US5402931 A	19950404	US19930119656	19930913
USRE34940 E	19950516	US19930086839	19930707
WO9310009 A1	19930527	WO1992US09850	19921119

Probable Assignee: GULF STATES PAPER CORP

Assignee(s):(std)**:** KLIKLOK CORP ; GULLIVER RICHARD F ; GULF STATES PAPER CORP ; GULF STATE PAPER CORP

Assignee(s): GULF STATES PAPER A OF DELAWARE CORP

Inventor(s):(std)**:** GREEN JAMES R ; GULLIVER RICHARD E ; GULLIVER RICHARD F ; RICHARD F GULLIVER

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; MOFFAT AND CO

Designated states: AT AU BE CH DE DK ES FR GB GR IE IT JP LI LU MC NL SE

International class (IPC 8–9): B65D5/20 B65D5/24 B65D5/54 B65D5/56 B65D81/34 (Advanced/Invention); B65D5/56 B65D81/34 (Advanced/Non–invention); B65D5/20 B65D5/54 (Core/Invention)

International class (IPC 1–7): B65D5/24 B65D5/42 B65D5/46 B65D5/48 B65D5/54 B65D5/56 B65D5/58 B65D5/66 B65D5/68 B65D81/34

CPC: Y10S229/906 Y10S229/903 B65D5/241 B65D5/244 B65D5/2004 B65D5/2038 B65D5/54 B65D5/545

European class: B65D5/20A B65D5/20D B65D5/24A B65D5/24C B65D5/54 B65D5/54D

US class: 229/117.12 229/120 229/120.011 229/120.16 229/120.17 229/123.2 229/125.35 229/186 229/207 229/228 229/240 229/242 229/243 229/903 229/906 426/118 493/128 493/151 493/183

Classification Explorer

Cited documents: USRE32902 E, US5330099 A, US5267686 A, US5265796 A, US5217159 A, US5183201 A, US5038940 A, US5012979 A, US5012929 A, US5009363 A, US5009320 A, US4971218 A, US4951868 A, US4944451 A, US4930639 A, US4919785 A, US4919269 A, US4905889 A, US4901911 A, US4848648 A, US4836439 A, US4746019 A, US4742917 A, US4594492 A, US4592914 A, US4567341 A, US4449633 A, US4361236 A, US4304352 A, US4215780 A, US4130237 A, US3863832 A, US3829004 A, US3721380 A, US3510047 A, US3253765 A, US3211359 A, US3207417 A, US3184147 A, US3146934 A, US3109577 A, US3064874 A, US2847151 A, US2828061 A, US2781159 A, US2665616 A, US2409460 A, US2241711 A, US2241710 A, US2215348 A, GB944763 A, GB8052, GB191308052 A, GB191208052 A, FR2442198 A1, FR1404055 A, DE939550 A, DE738714 A, DE396992 A, DE1265648 B, DE1142099 B, DE1022516 B,

BE521344 A,

Forward Citations: WO13001215, WO07100826, WO05029964, WO0068093, WO0068093, USD699447, USD548583, USD535875, US9499296, US9434488, US8912474, US8835822, US8814033, US8785827, US8735785, US8723090, US8698055, US8618453, US8598500, US8552348, US8500936, US8487225, US8461498, US8426786, US8426785, US8367988, US8338765, US8338764, US8240478, US8217324, US8215085, US8108992, US7985462, US7793821, US7757860, US7685676, US6049072, US5928554, US5865367, US5865366, US5839652, US5839574, US5753895, US5641118, US5588583, US5402931, US5383596, US5337951, US5330099, US5267686, US5265796, US5242106, US2011259503, US2011114715, US2011073593, US2011031304, US2010288657, US2010200646, US2010055260, US2010051675, US2010019020, US2009200364, US2009117338, US2009114643, US2009095749, US2009095748, US2009095747, US2009095746, US2009095744, US2009095743, US2009095741, US2009094823, US2009039144, US2008041925, US2008000359, US2007241102, US2007210078, US2007199176, US2007187400, US2007187399, US2007181569, US2007181568, US2007074993, US2006159808, US2006118605, US2004101605, TWI409193, GB2383993, EP1670316, EP0722892, EP0687631, EP0671332,

Abstract:
Source: US5183201A A carton tray formed from a flat carton blank including a bottom wall panel, four side wall panels integral with the bottom wall panel along four side fold lines and a gusset wall panel integral with each pair of adjacent side wall panels along two end fold lines extending from a corner point in angularly related relation with respect to one another. In erected condition, each gusset wall panel is brought into surface−to−surface abutting relation with an end portion of one of the associated pair of adjacent side wall panels defined by one of the associated two end fold lines. An adhesive adheres each gusset wall panel with the associated one side wall end portion to thereby form a sealed integral corner construction between each pair of adjacent side wall panels which is defined (1) exteriorly by the associated gusset wall panel adhesively adhered in abutting relation to the associated one side wall end portion with the associated one end fold line extending generally in a plane coincident with an interior surface of the associated one side wall panel from the associated corner point and (2) interiorly by another of the associated two end fold lines extending from the associated corner point along the surface of the associated one side wall panel.

0) US2008099480A – BEVERAGE CONTAINER CONSTRUCTION

41) Family number: 41770487 (US2008099480A) © PatBase

Title: BEVERAGE CONTAINER CONSTRUCTION

Priority: US20060854294P 20061026 US20070713860 20070305 WO2007US22447 20071023 US20090211468P 20090330 US20100798052 20100329

Family:

Publication number	Publication date	Application number	Application date
CN101568474 A	20091028	CN200780039381	20071023
CN101568474 B	20120502	CN200780039381	20071023
EP2076445 A2	20090708	EP20070839737	20071023
US2008099480 AA	20080501	US20070713860	20070305
US2010219188 AA	20100902	US20100798052	20100329
US8109406 BB	20120207	US20070713860	20070305
US8292112 BB	20121023	US20100798052	20100329
WO08057207 A2	20080515	WO2007US22447	20071023
WO08057207 A3	20080821	WO2007US22447	20071023
WO10114593 A1	20101007	WO2010US00937	20100329

Probable Assignee: SHANGHAI PREC ELECTRONIC PLAST

Assignee(s):(std)**:** CHANG CHARLES ; SHANGHAI PREC ELECTRONIC PLAST ; SHANGHAI PREC ELECTRONIC PLASTIC HARDWARE CO LTD

Assignee(s): SHANGHAI PRECISION ELECTRONIC PLASTIC HARDWARE CO ; SHANGHAI PRECISION ELECTRONIC PLASTIC HARDWARE CO LTD

Inventor(s):(std)**:** CHANG CHARLES ; CHARLES CHANG

Agent(s): MITTLER ENRICO; K GIBENR LEHMANN; K GIBNER LEHMANN; K GIBNER; LEHMANN K GIBNER; GIBNER LEHMANN K

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/32 B65D17/34 B65D21/00 B65D41/32 B65D8/02 B65D85/00 (Advanced/Invention); B65D17/28 B65D21/00 B65D85/00 (Core/Invention)

CPC: B65D17/165 B65D2517/0014 B65D2517/0062 B65D2517/0089 B65D2517/0004 B65D2517/0052 B65D2517/0077 Y10S220/906

European class: B65D17/16B2 L65D517/00Y1A L65D517/00Y2C L65D517/00Y6B L65D517/00Y7A1A L65D517/00Y7C2 L65D517/00Y7Z

US class: 206/222 206/459.5 206/459.500S 220/258.4 220/269 220/270 220/270P 220/272 220/821 220/906

Classification Explorer

Cited documents: USD246229 S1, US7665623 BB, US7137524 BB, US7011227 BB, US6779675 BB, US6435368 BA, US6427861 BA, US6375029 BB, US6260728 BA, US5964366 A, US5934497 A, US5813559 A, US5782373 A, US5730314 A, US5711448 A, US5663355 A, US5655678 A, US5645190 A, US5555992 A, US5405039 A, US5385254 A, US5346087 A, US4915246 A, US4779754 A, US4732292 A, US4596342 A, US4550851 A, US4431112 A, US4262815 A, US4014455 A, US3967754 A, US3934750 A, US3883033 A, US3858754 A, US3795340 A, US3341055 A, US2008000905 AA, US2007181526 AA, US2007039961 AA, US2007029324 AA, US2006237459 AA, US2006201944 AA, US2006175332 AA, US2005017005 AA, US2005006389 AA, US2004108237 AA, US2004056032 AA, US2003217489 AA, US2003132230 AA, US2003098306 AA, US2002139800 AA, US2002088803 AA, JP200491022, JP2004091022 A2,

Forward Citations:

WO16192419, WO14150673, WO14055399, USD787952, USD778734, USD762114, USD751922, USD750488, USD749415, USD727725, USD715647, USD715144, USD698668, US9637269, US9446879, US9272819, US9233784, US9033174, US8844761, US8567158, US2014190971, US2014103040, US2013043248, US2013037542, US2010282706, US2009200306, EP3009368, EP2918507, EP2557051, CN105492330, CN104837733, CN102951343,

Abstract:
Source: US2008099480A A beverage container includes a can body having a side wall, a neck portion of reduced diameter, a closure lid and an anchor structure on the closure lid. The anchor structure is offset with respect to the center of the lid. A pull tab has a mounting hole which fits onto the anchor structure. One end of the pull tab has a grip handle, and the other end has a puncturing nose. The pull tab is turnable on the anchor structure, and thus also turnable with respect to the closure lid. The pull tab is of a length whereby it normally just fits between the opposite locations of a peripheral groove on the closure lid. The pull tab can be manually turned from a first position overlying the closure lid, to a second position wherein it overhangs one part of the peripheral groove. The construction thus provides an extended handle length to permit the user to more easily grasp and raise the pull tab, and open the container, for use. The pull tab remains captive with the open container, for anti−litter and recycling purposes.

0) US5638659A – PACKAGING MACHINE

42) Family number: 42123978 (US5638659A) © PatBase

Title: Packaging machine

Priority: US19950577188 19951222 WO1996US15807 19961002

Family:

Publication number	Publication date	Application number	Application date
AR005196 AA	19990414	AR1996P105850	19961220
AU199672526 A1	19970717	AU19960072526	19961002
AU701146 B2	19990121	AU19960072526	19961002
BRPI9606700 A	19990427	BR1996PI06700	19961002
CA2211001 AA	19970721	CA19962211001	19961002
CO4520122 A1	19971015	CO19960063151	19961202
EP0808275 A1	19971126	EP19960934003	19961002
EP0808275 A4	20000816	EP19960934003	19961002
IL119876 A0	19970318	IL19960119876	19961220
JP11500984 T2	19990126	JP19970519697T	19961002
NZ319898 A	19990429	NZ19960319898	19961002
TW305343 Y	19970511	TW19960209157U	19960617
US5638659 A	19970617	US19950577188	19951222
WO9723386 A1	19970703	WO1996US15807	19961002
ZA9610699 A	19970626	ZA19960010699	19961219

Probable Assignee: RIVERWOOD INT CORP

Assignee(s):(std)**:** RIVERWOOD INT CORP ; RIVERA TEODORO

Assignee(s): RIVERWOOD INT ; JPMORGAN CHASE BANK ADMINISTRATIVE AGENT AS ; MONCRIEF FRANK N ; STEINBUCHEL HERMAN J IV ; RIVERWOOD INT CORP US ; BANK OF AMERICA NA ; BANK OF AMERICA NA ADMINISTRATIVE AGENT AS ; BROWN STEVEN ; CHASE MANHATTAN BANK ADMINISTRATIVE AGENT AS ; GRAPHIC PACKAGING INT ; GRAPHIC PACKAGING INT INC

Inventor(s):(std)**:** BROUWN STEVEN ; BROWN STEVEN ; IV STEINBUCHEL HERMAN J ; MONCRIEF FRANK N ; STEINBUCHEL HERMAN J ; STEINBUCHEL HERMAN J IV ; STEINBUCHEL IV HERMAN J ; STEVEN BROWN

Inventor(s): STEVEN BROUWN ; FRANK N MONCRIEF ; HERMAN J IV STEINBUCHEL ; HERMAN J STEINBUCHEL ; HERMAN J STEINBUCHEL IV

Agent(s): PHILLIPS ORMONDE FITZPATRICK; MACRAE AND CO; MARGARITA CASTELLANOS ABONDANO

Designated states: AT AU BE BR CA CH DE DK ES FI FR GB GR IE IT JP KR LU MC NL NO NZ PT SE

International class (IPC 8–9): B65B21/02 B65B35/44 B65B5/00 B65B59/02 B65G17/00 B65G47/28 (Advanced/Invention); B65B35/44 B65B5/00 B65B59/00 (Core/Invention); B65B21/02 (Core/Non–invention)

International class (IPC 1–7): B65B21/02 B65B35/30 B65B35/44 B65B5/00 B65B59/02 B65G17/40 B65G47/28

CPC: B65B35/44 B65B59/02 B65G19/265

European class: B65B35/44 B65B59/02 B65G19/26B

US class: 53/251 53/448 53/462 53/48.7 53/543

Classification Explorer

Cited documents: US5515668 A, US5337887 A, US5237795 A, US4982551 A, US4642967 A, US4582193 A, US3660961 A, US3417540 A, GB1182022 A, CH547218 A,

Forward Citations: WO16030273, WO13066701, WO13059546, WO12143724, US9573744, US9573710, US9499319, US9487320, US9481524, US9481501, US9346574, US9346573, US9284084, US9233769, US9221628, US9205939, US8695787, US8490780,

US8464864, US8182406, US8079944, US7565964, US6367312, US2013111855, US2013008133, US2010200371, US2007220836, US2006154791, US2006090424, JP2014534934, JP2014532597, GB2375256, EP2773565, EP2773565, EP2602220, EP1599386, CN104803150, CN104024112, CN104024112, CN103946114, CN103946114, CN102390564,

Abstract:
Source: US5638659A A packaging machine (5) for moving a spaced series of groups of containers along a path of travel in a packaging machine line is disclosed. The packaging machine includes a variable pitch lugged conveyor belt assembly (12) having a pair of conveyor chains (61, 62) equally spaced from a longitudinal axis extending along the path of travel, and a pair of generally parallel side guides (17) mounted one each on a pair of accessory rails (14) movably supported on the framework (7) of the packaging machine, and extending along opposite sides of the path of travel. The conveyor chains are constructed to be moved laterally toward and away from each other, and the side guides are constructed to be simultaneously moved laterally toward and away from the conveyors with the accessory rails, respectively, as the conveyor chains are moved. Each conveyor chain includes a spaced series of pop−up lug assemblies (63) in which a pop−up lug (92) of each assembly can be individually selected for reciprocal movement from a lowered position flush with respect to the surface of the conveyor chain into a raised position extended above and with respect to the surface of the conveyor chain for varying the pitch of the pop−up lugs along the length of the conveyor chains. Each conveyor chain also includes a plurality of modular table−top lugs (65) which are constructed to be yieldably urged into position on an endless chain (84).

0) US2014305818A – APPARATUS FOR RECEIVING HETEROGENEOUS MATERIALS...

43) Family number: 52204929 (US2014305818A) © PatBase

Title: APPARATUS FOR RECEIVING HETEROGENEOUS MATERIALS

Priority:

AU20130257495	20131115	AU20160204528	20160630	KR20110035917	20110418
KR20110095500	20110921	KR20110095496	20110921	KR20110095498	20110921
KR20110119032	20111115	KR20110121895	20111121	KR20110122568	20111122
KR20110124710	20111127	KR20110129329	20111205	KR20110130630	20111208
KR20110131379	20111208	KR20120007459	20120126	KR20120014054	20120213
KR20120014055	20120213	KR20120017712	20120221	KR20120022733	20120306
KR20120024767	20120311	KR20120036393	20120407	KR20120038183	20120412
KR20120013496	20120209	KR20120014003	20120210	WO2012KR02969	20120418
KR20120022733	20130306	WO2013KR01067	20130212	US20140355960	20140502
US20150963853	20151209				

Family:

Publication number	Publication date	Application number	Application date
AU2013257495 AA	20140130	AU20130257495	20131115
AU2016204528 AA	20160714	AU20160204528	20160630
CA2838483 AA	20131205	CA20122838483	20120418
CN103619722 A	20140305	CN201280030066	20120418
CN103619722 B	20170208	CN201280030066	20120418
EP2700589 A2	20140226	EP20120774757	20120418
EP2700589 A4	20141001	EP20120774757	20120418
IN09876DN2013 A	20160603	IN2013DN09876	20131118
KR20120118389 A	20121026	KR20110035917	20110418
KR20130031753 A	20130329	KR20110095496	20110921
KR20130031754 A	20130329	KR20110095498	20110921
KR20130031756 A	20130329	KR20110095500	20110921
KR20130053611 A	20130524	KR20110119032	20111115
KR20130056126 A	20130529	KR20110121895	20111121
KR20130056794 A	20130530	KR20110122568	20111122
KR20130058785 A	20130605	KR20110124710	20111127
KR20130086660 A	20130805	KR20120007459	20120126
KR20130092331 A	20130820	KR20120014003	20120210
KR20130092661 A	20130821	KR20120014055	20120213
KR20130096130 A	20130829	KR20120017712	20120221
KR20130101749 A	20130916	KR20120022733	20120306
KR20130103647 A	20130924	KR20120024767	20120311
KR20130113842 A	20131016	KR20120036393	20120407
KR20130115666 A	20131022	KR20120038183	20120412
US2014305818 AA	20141016	US20120355960	20120418
US2015203261 AA	20150723	US20130422140	20130212
US2016090222 AA	20160331	US20150963853	20151209
US9650190 BB	20170516	US20130422140	20130212
WO12144802 A2	20121026	WO2012KR02969	20120418
WO12144802 A3	20130321	WO2012KR02969	20120418
WO13119088 A2	20130815	WO2013KR01067	20130212
WO13119088 A3	20131010	WO2013KR01067	20130212

Probable Assignee: LEE SUN HEE

Assignee(s):(std)**:** LEE JEONG MIN ; LEE JUNG MIN ; LEE SEONG JAE ; LEE SU JAE ; LEE TAE KEUN ; LEE SUN HEE ; LEE SUNG JAE ; KIM DO YI

Assignee(s): KIM WOONG KI ; SU JAE LEE

Inventor(s):(std): LEE JEONG MIN ; LEE SEONG JAE ; LEE SU JAE

Agent(s): FREEHILLS PATENT ATTORNEYS; FPA PATENT ATTORNEYS PTY LTD; DEETH WILLIAMS WALL LLP; PFENNING MEINIG AND PARTNER GBR; FAY KAPLUN AND MARCIN LLP

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A61J1/05 B29C45/14 B29C45/16 B29C49/00 B65D1/02 B65D25/08 B65D25/40 B65D41/04 B65D41/14 B65D41/32 B65D47/06 B65D51/18 B65D51/20 B65D51/22 B65D51/24 B65D51/28 B65D53/02 B65D75/38 B65D81/32 B65D85/00 (Advanced/Invention)

CPC: B29C45/1676 B65D51/2821 B65D1/0238 B65D1/0246 B65D53/02 B65D81/3283 B65D2501/0054 B65D51/2842 B65D51/2864 B65D51/2835 B65D51/285

US class: 206/219 206/221 206/222

Classification Explorer

Cited documents: WO10126341 A2, WO06046725 A1, WO02098756 A2, US6148996 A, US3347410 A, US2012325697 AA, US2010059394 AA, US2010012613 AA, US2009236244 AA, US2009127274 AA, US2008202949 AA, US2008093326 AA, US2003132244 AA, KR20100122825 A, KR20100119462 A, KR20100104422 A, KR20100042570 A, KR20100011941 U, KR20090082059 A, KR20050071383 A, KR20040039227 A, JP3119434 U, JP2006519148 T2, JP2006290462 A2, CN1902103 A, CN1874954 A, CN101374734 A, CN101061044 A,

Forward Citations: WO17039424, WO17039423, WO16163815, WO16068612, US2017129665, KR20160073457, KR101723959, KR101635810, CN105173418, CN104555057, CN103600906,

Abstract:
Source: US2014305818A An apparatus containing heterogeneous materials which is coupled to a mouth part of a container containing contents such as liquid or the like, comprises a main body to be coupled and fixed to the mouth part of the container; and an accommodating part having a storage space formed inside of the main body, wherein an upper foldable connecting part of the inner storage space of the accommodating part and an opening formed below the foldable connecting part break an accommodating part sealing part which seals the lower end of the accommodating part, thereby allowing the contents of the storage space of the accommodating part to drop down into the container to be mixed. An opening is formed at the bottom of the upper portion of the foldable connecting part and the foldable connecting part is formed between the opening and the main body, wherein a soft foldable part is formed at the top or bottom of the foldable connecting part.

0) US2012234715A – ONE–PIECE FOLDABLE CORRUGATED COOLER WITH IMPRO...

44) Family number: 51932611 (US2012234715A) © PatBase

Title: ONE–PIECE FOLDABLE CORRUGATED COOLER WITH IMPROVED LOCKING SYSTEM

Priority:

US20110049890	20110316	US20110452640P	20110314	US20120420393	20120314
US20120420367	20120314	US20120420411	20120314	US20120462799	20120502
US20120465033	20120507	US20120465030	20120507	US20120465031	20120507
US20120465032	20120507	US20130071592	20131104	US20140306072	20140616
US20150628440	20150223	US20130059430	20131021	US20160996382	20160115

Family:

Publication number	Publication date	Application number	Application date
US2012234715 AA	20120920	US20120420393	20120314
US2012234846 AA	20120920	US20120420367	20120314
US2012234903 AA	20120920	US20120420411	20120314
US2012234904 AA	20120920	US20120462799	20120502
US2012238423 AA	20120920	US20110049890	20110316
US2012238424 AA	20120920	US20120465030	20120507
US2012238425 AA	20120920	US20120465031	20120507
US8343024 BA	20130101	US20120465033	20120507
US8348819 BA	20130108	US20120465032	20120507
US8348820 BB	20130108	US20120465030	20120507
US8348821 BB	20130108	US20120465031	20120507
US8424749 BB	20130423	US20120462799	20120502
US8562499 BB	20131022	US20110049890	20110316
US8573430 BB	20131105	US20120420393	20120314
US8733625 BB	20140527	US20120420411	20120314
US8752721 BA	20140617	US20130071592	20131104
US8960471 BA	20150224	US20140306072	20140616
US9238522 BA	20160119	US20150628440	20150223
US9469433 BA	20161018	US20160996382	20160115
US9475247 BA	20161025	US20130059430	20131021

Probable Assignee: THATBOX DESIGN LLC

Assignee(s):(std)**:** COSTANZO DONN J ; COSTANZO JR DONN J ; THATBOX DESIGN LLC

Inventor(s):(std)**:** COSTANZO DONN J ; COSTANZO JR DONN J

Agent(s): TILLMAN WRIGHT PLLC; CHAD D; JEREMY C

International class(IPC 8–9)**:** B31B1/26 B31B1/62 B31B1/88 B31B13/02 B31B3/00 B31B7/60 B65D25/00 B65D43/16 B65D5/00 B65D5/20 B65D5/24 B65D5/42 B65D5/46 B65D5/468 B65D5/56 B65D5/62 B65D5/66 B65D5/68 B65D81/38 (Advanced/Invention)

CPC: B65D81/386 B65D5/563 B65D5/2047 B31B1/26 B65D5/241 B65D5/46112

European class: B65D5/24A B65D5/46B2A2 B65D5/56B B65D81/38G5

US class: 1/1 206/45.29 206/459.5 220/62 220/738 229/100 229/116.1 229/116.5 229/117.12 229/117.14 229/125 229/131 229/141 229/144 229/145 229/149 229/154 493/121 493/126 493/128 493/162 493/185 493/311 493/405 493/53 493/84

Classification Explorer

Cited documents: WO9611848 A1, USRE27825 E, US8960471 BA, US8752721 BA, US8573430 BB, US8348821 BB, US8348820 BB, US8348819 BA, US8343024 BA, US811689 A, US7870995 BA, US7841512 BB, US6837420 BB, US6736309 BA, US662619 A, US6412686 BA, US6402020 BA, US6253993 BA, US6164526 A, US6026983 A, US5853121 A, US5588585 A, US5562228 A, US5445315 A, US5392985 A, US5392984 A, US5307986 A, US5303863 A, US5284294 A, US5139195 A, US5102036 A, US5094359 A, US5062527 A, US5042715 A, US5020337 A, US4979669 A, US4953779

A, US4890576 A, US472463 A, US4500306 A, US4341341 A, US4339069 A, US4283190 A, US4238069 A, US4119265 A, US4068795 A, US4058226 A, US4017019 A, US4006670 A, US3747480 A, US371230 A, US3650183 A, US3365114 A, US3309970 A, US3201912 A, US3199762 A, US3154052 A, US3119547 A, US2842035 A, US2757849 A, US2532479 A, US2512382 A, US2019995 A, US2017129 A, US2013015235 AA, US2012238425 AA, US2012238424 AA, US2012238423 AA, US2012234904 AA, US2012234903 AA, US2012234846 AA, US2012234715 AA, US2008290149 AA, US2007037682 AA, US2004011801 AA, US1525360 A, US1190797 A, US1075844 A, EP0337280 A1,

Forward Citations: WO16076706, WO13126212, USD766718, USD752429, USD745392, USD743247, USD726533, USD720989, USD714139, USD710691, USD695605, US9615684, US9499294, US9475247, US9409369, US9238522, US9085385, US8733625, US8573430, US8567662, US8562499, US8424749, US8348821, US8348820, US8348819, US8343024, US2014238819, US2013015235, US2012238423, CN103057785,

Abstract:
Source: US2012234715A A one−piece, foldable corrugated cooler includes a storage portion having a bottom panel, two side panels, two end panels, and four corner panels; two handle panels forming a lid and a two−ply handle; and at least one two−ply locking panel. The at least one two−ply locking panel is adapted to secure the lid in a closed orientation, and the at least one two−ply locking panel is integral with at least one corner panel and at least one handle panel.

0) US2008207694A – HYDROXAMATES AS HISTONE DEACETYLASE INHIBITORS ...

45) Family number: 33365340 (US2008207694A) © PatBase

Title: HYDROXAMATES AS HISTONE DEACETYLASE INHIBITORS AND PHARMACEUTICAL FORMULATIONS CONTAINING THEM

Priority: IT2005FI00041 20050315 IT2005FI00239 20050315 IT2005FI00239 20051121 WO2006EP60687 20060314

Family:

Publication number	Publication date	Application number	Application date
AP200704188 A0	20071031	AP20070004188	20060314
AR058002 AA	20080123	AR2006P100977	20060314
AU2006224624 AA	20060921	AU20060224624	20060314
BRPI0606290 A2	20090609	BR2006PI06290	20060314
CA2600528 AA	20070910	CA20062600528	20060314
CN101155780 A	20080402	CN200680006679	20060314
CO6321134 A2	20110920	CO20070107399	20071012
CR9431 A	20080731	CR20070009431	20071011
EA012909 B1	20100226	EA20070001970	20060314
EA200701970 A1	20080228	EA20070001970	20060314
EP1868997 A1	20071226	EP20060708749	20060314
HK1119669 A3	20090313	HK20080106850	20080620
IL185882 A0	20080106	IL20060185882	20060314
ITFI20050041 A1	20060916	IT2005FI00041	20050315
ITFI20050239 A1	20070522	IT2005FI00239	20051121
JP2008533091 T2	20080821	JP20080501287T	20060314
KR20070112240 A	20071122	KR20077022763	20071005
MA29389 B1	20080401	MA20070030291	20071011
MX2007011072 A1	20071008	MX20070011072	20060314
NO20075281 A	20071015	NO20070005281	20071015
SA2247 B1	20090719	SA20060270135	20060508
TH95055 A	20090409	TH20061001032	20060309
TW200724529 A	20070701	TW20060107569	20060307
US2008207694 AA	20080828	US20060886160	20060314
VN8169 A1	20100225	VN20070002121	20060314
WO06097460 A1	20060921	WO2006EP60687	20060314
WO06097460 C1	20071101	WO2006EP60687	20060314
ZA200708749 A	20090826	ZA20070008749	20071012

Probable Assignee: MENARINI INT OPERATIONS LUXEMBOURG SA

Assignee(s):(std)**:** ANDREA PIERO D ; D ANDREA PIERO ; FATTORI DANIELA ; MARASTONI ELENA ; MENARINI INT OPERATIN S LUXEMBORG S A ; MENARINI INT OPERATIONS LUXEMBOURG SA ; MENARINI INT OPERATIONS L ; MENARINI INTERNAT OPERATION LU ; MENARINI INTERNAT OPERATIONS LUXEMBOURG SA ; MENARINI INT OPERATIONS LU SA ; ROSSI CRISTINA ; PORCELLONI MARINA

Assignee(s): MENARINI INTERNATIONAL OPERATIONS LUXEMBURGO S A ; MENARINI INT OPERATIONS LUXEMBOURG S A ; MENARINI INT OPERATIONS L UXEMBOURG SA ; MENARINI INTERNATIONAL OPERATIONS L UXEMBOURG S A ; MENARINI INTERNAT OPERATIONS L ; MENARINI INTERNATIONAL OPERATIONS LUXEMBOURG S A ; MENARINI INTERNATIONAL OPERATIONS LUXEMBOURG SA ; MENARINI INTERNATIONAL OPERATION LUXEMBOURG S A ; MENARINI INT OPERATIN S LUXEMBORG SA

Inventor(s):(std)**:** ANDREA PIERO D ; CRISTINA ROSSI ; D ANDREA PIERO ; DANDREA PIERO ; DANIELA FATTORI ; ELENA MARASTONI ; FATTORI DANIELA ; MARASTONI ELENA ; MARINA PORCELLONI ; PIERO D ANDREA ; PORCELLONI MARINA ; ROSSI CHRISTINA ; ROSSI

CRISTINA

Agent(s): FISHER ADAMS KELLY; FISHER ADAMS KELLY PTY LTD; FISHER ADAMS KELLY CALLINANS; BERESKIN AND PARR; JAY S CINAMON ABELMAN FRAYNE AND SCHWAB; CONG TY TNHH BAN CA

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A61K31/445 A61P3/00 A61K31/4523 A61K31/4525 A61K31/4535 A61K31/454 A61K31/4709 A61K31/4725 A61K45/00 A61P1/16 A61P11/00 A61P29/00 A61P3/10 A61P33/02 A61P35/00 A61P35/02 A61P37/02 A61P43/00 C07D211/32 C07D211/34 C07D211/96 C07D401/06 C07D401/12 C07D405/06 C07D409/06 C07D409/14 C07D413/06 C07D417/06 (Advanced/Invention); C07D211/34 C07D211/96 C07D409/14 C07D413/06 (Advanced/Non–invention); A61K31/445 A61K31/4523 A61P3/00 A61P35/00 C07D211/00 C07D401/00 C07D405/00 C07D409/00 C07D413/00 C07D417/00 (Core/Invention); A61K A61P C07D (Subclass/Invention)

International class (IPC 1–7): A61K31/445 A61K31/4523 A61K31/4525 A61K31/4535 A61K31/454 A61P3/00 A61P35/00 C07D211/34 C07D211/96 C07D401/06 C07D405/06 C07D409/06 C07D409/14 C07D413/06 C07D417/06

CPC: C07B2200/11 C07D211/34 C07D211/96 C07D401/06 C07D405/06 C07D409/06 C07D409/14 C07D413/06 C07D417/06

European class: C07D211/34 C07D211/96 C07D401/06 C07D405/06 C07D409/06 C07D409/14 C07D413/06 C07D417/06 M07B200/11

US class: 514/331 546/233 546/233S

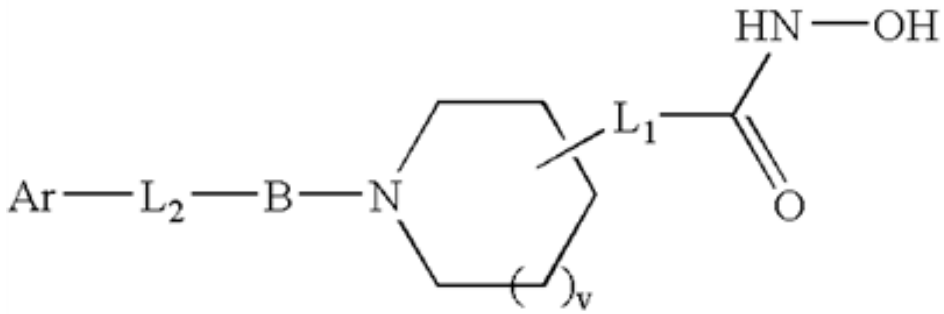
Classification Explorer

Cited documents: WO05040101 A1, WO05004861 A1, WO03082288 A1, WO03076438 A1, US2004072802 AA,

Forward Citations: WO12152208, WO09026446, WO09026446, WO07054727, WO07038459, US9216962, KR101577520, JP2014517831, CN102775368, CN102775368,

Abstract:
Source: US2008207694A Compounds of structure (I) having histone deacetylase (HDAC) inhibitor activity are described. The compounds are chemically characterised by the presence of hydroxamic acid, with zinc as chelator, and an aromatic nucleus connected by a linker in which either a bicyclic aromatic system or a piperidino ring are present.

(I)



0) US5505305A – MOISTURE–PROOF RESEALABLE POUCH AND CONTAINER

46) Family number: 11203774 (US5505305A) © PatBase

Title: MOISTURE–PROOF RESEALABLE POUCH AND CONTAINER

Priority: US19920964511 19921021 US19930040624 19930331 US19940186004 19940124 US19930098617 19930728 US19950464050 19950605 US19950484986 19950607 WO1993US10010 19931019 WO1994US03863 19940408

Family:

Publication number	Publication date	Application number	Application date
AT174211 E	19981215	AT19930923948T	19931019
DE69322521 D1	19990121	DE19936022521	19931019
DE69322521 T2	19990506	DE19936022521T	19931019
DE69407200 D1	19980115	DE19946007200	19940408
DE69407200 T2	19980709	DE19946007200T	19940408
EP0665737 A1	19950809	EP19930923948	19931019
EP0665737 B1	19981209	EP19930923948	19931019
EP0741555 A1	19961113	EP19950922425	19940408
EP0741555 B1	19971203	EP19950922425	19940408
JP8502427 T2	19960319	JP19940510357T	19931019
JP9508287 T2	19970826	JP19950519540T	19940408
US5505305 A	19960409	US19940186004	19940124
US5687848 A	19971118	US19950464050	19950605
US5704480 A	19980106	US19950484986	19950607
WO9408541 A1	19940428	WO1993US10010	19931019
WO9519754 A1	19950727	WO1994US03863	19940408

Probable Assignee: MINNESOTA MINING AND MFG

Assignee(s):(std)**:** MINNESOTA MINING AND MFG

Assignee(s): MINNESOTA MINING AND MFG CO ; MINNESOTA MINING AND MFG CO SAINT PAUL MINN US ; MINNESOTA MINING AND MFG CO ST PAUL MINN US ; MINNESOTA MINING ADN MFG ; MINNESOTA MINING ADN MFG CO ; MINNESOTA MINING AND MANUFACTURING COMPANY

Inventor(s):(std)**:** BYRAM DAVID ; BYRAM DAVID C ; CAMPAGNA ANTHONY ; CAMPAGNA ANTHONY J ; DRAKE GERALD ; DRAKE GERALD E ; EDGAR JASON ; EDGAR JASON L ; EULL PATRICIA ; EULL PATRICIA A ; JARZYNSKI MICHAEL ; JARZYNSKI MICHAEL J ; NASH JAMES ; NASH JAMES E ; NOVAK BARRY ; NOVAK BARRY J ; OSTER CRAIG ; OSTER CRAIG D ; SCHOLZ MATTHEW ; SCHOLZ MATTHEW T ; BARTIZAL DENNIS ; BARTIZAL DENNIS C

Inventor(s): BARTIZAL DENNIS C SAINT PAUL MN 55133 3427 US ; NOVAK BARRY J SAINT PAUL MN 55133 3427 US ; EULL PATRICIA A SAINT PAUL MN 55133 3427 US ; CAMPAGNA ANTHONY J SAINT PAUL MN 55133 3427 US

Designated states: AT BE CH DE DK ES FR GB GR IE IT JP LI LU MC NL PT SE

International class (IPC 8–9): A61B19/02 A61F13/04 A61F15/00 B65D33/25 B65D83/08 (Advanced/Invention); A61F13/04 A61F15/00 B65D33/25 B65D83/08 (Core/Invention)

International class (IPC 1–7): A61B17/06 A61B19/02 A61F13/04 A61F15/00 A61L15/00 A61L15/12 B65D30/20 B65D33/00 B65D33/25 B65D51/00 B65D83/08

CPC: Y10S206/818 A61F13/041 A61F15/001 A61F15/002 B65D2313/04

European class: A61F13/04C A61F15/00B A61F15/00B2 L65D313/04

US class: 206/438 206/440 206/494 206/818 220/230 383/120 383/66 383/68

Classification Explorer

Cited documents: WO9408541 A1, USRE26488 E, US5505305 A, US5178300 A, US5148916 A, US5145091 A, US5027803 A, US5005707 A, US5003970 A, US4968542 A, US4903837 A, US4899738 A, US4869046 A, US4848575 A, US4790436 A, US4774937 A,

US4770299 A, US4770229 A, US4732299 A, US4672688 A, US4667661 A, US4609578 A, US4598826 A, US4451321 A, US4295565 A, US4269315 A, US4232721 A, US4193513 A, US4176746 A, US4146133 A, US4033013 A, US3961721 A, US393874 A, US3795355 A, US3749301 A, US3629905 A, US3575225 A, US3454197 A, US3397818 A, US3380646 A, US3201027 A, US2999275 A, US2798522 A, US2672257 A, US2633006 A, US2446308 A, US2367417 A, US2017176 A, US1899625 A, US172039 A, US1671825 A, US1208701 A, US1123470 A, JP1167055 A2, GB1351196 A, EP0004396 A2,

Forward Citations: WO9958090, WO9806369, WO9519754, WO17063620, WO15014802, WO07140916, WO07140916, WO06115564, WO0178640, USD788582, USD787319, USD784127, USD781702, USD778719, USD777026, USD772600, USD772069, USD768479, USD766082, USD764914, USD761651, USD756219, USD754534, USD753996, USD753995, USD750477, USD748471, USD747646, USD747202, USD747195, USD747189, USD746673, USD740114, USD739232, USD734144, USD733549, USD730725, USD726535, USD725467, USD715643, USD655154, USD614023, USD608193, USD433569, US9663282, US9656783, US9630761, US9221590, US9205967, US9187228, US9162786, US9150342, US8992085, US8973783, US8951591, US8893955, US8889205, US8746483, US8722122, US8662298, US8602244, US8602242, US8556876, US8529422, US8528765, US8443793, US8413306, US8408792, US8308363, US8231024, US8114451, US8109306, US8069537, US8066137, US8051979, US7963413, US7694816, US7568566, US7478460, US7303711, US7240876, US7156252, US7141283, US7037283, US7025504, US7011448, US6981590, US6857779, US6749551, US6740346, US6647741, US6015045, US5704480, US5687848, US2015144649, US2015004338, US2014239009, US2013243354, US2013075416, US2013032503, US2012312868, US2012298663, US2012223093, US2012128273, US2011308974, US2011147254, US2010303391, US2010213019, US2010140129, US2010018974, US2009282654, US2009120828, US2009039078, US2009000968, US2008240627, US2008164172, US2008116697, US2008111689, US2008037911, US2007264469, US2007175792, US2007074980, US2006287634, US2006237579, US2005242097, US2005230465, US2005186385, US2005183248, US2005139236, US2005064242, US2005036720, US2005011906, US2004218839, US2004206638, US2004178108, US2004115323, US2004077979, US2003123760, US2003019780, JP2014525879, JP2013538435, JP2008086707, JP2001064321, EP2319471, EP2090518, EP1871699, EP1864916, EP1485561, EP0925053, EP0878179,

Abstract:
Source: US5505305A The present invention relates to an easy−to−use and effective magnetically resealable moisture−proof pouch containing moisture−curable orthopedic splinting/casting product in bulk form or in individually packaged rolls. The preferred pouch incorporates a frame disposed about an opening into the pouch which provides a mounting place for a moisture−proof magnetic seal. Also disclosed are containers for the preferred pouches which are adapted for use with the magnetic sealing system according to the present invention.

0) US2008168691A – SIGNAGE APPARATUS HAVING SIMPLE MAGNET–BASED ST...

47) Family number: 42022642 (US2008168691A) © PatBase

Title: SIGNAGE APPARATUS HAVING SIMPLE MAGNET–BASED STRUCTURE FOR EASE OF MODIFICATION

Priority: AU20080205610 20080111 AU20120261558 20121207 US20070653063 20070112 US20090460546 20090721 US20090460570 20090721 AU20150203125 20150611 WO2008US00393 20080111 US20100928716 20101217 US20110930845 20110118

Family:

Publication number	Publication date	Application number	Application date
AU2008205610 AA	20080724	AU20080205610	20080111
AU2012261558 AA	20130110	AU20120261558	20121207
AU2015203125 AA	20150702	AU20150203125	20150611
CA2675329 AA	20090713	CA20082675329	20080111
CN101874263 A	20101027	CN200880002134	20080111
CN101874263 B	20130807	CN200880002134	20080111
EP2111609 A2	20091028	EP20080724475	20080111
EP2111609 A4	20130306	EP20080724475	20080111
JP2010515950 T2	20100513	JP20090545606T	20080111
JP5159792 B2	20130313	JP20090545606T	20080111
MX2009007544 A1	20100315	MX20090007544	20080111
TW200844923 A	20081116	TW20080101219	20080111
TWI470592 B	20150121	TW20080101219	20080111
US2008168691 AA	20080717	US20070653063	20070112
US2009282715 AA	20091119	US20090460546	20090721
US2010024266 AA	20100204	US20090460570	20090721
US2011088298 AA	20110421	US20100928716	20101217
US2011113661 AA	20110519	US20110930845	20110118
US7870687 BB	20110118	US20070653063	20070112
US8205369 BB	20120626	US20090460570	20090721
US8464447 BB	20130618	US20110930845	20110118
WO08088735 A2	20080724	WO2008US00393	20080111
WO08088735 A3	20080925	WO2008US00393	20080111

Probable Assignee: PEMBERTON KIRK

Assignee(s):(std)**:** KIRK PEMBERTON ; PEMBERTON KIRK

Inventor(s):(std)**:** KIRK PEMBERTON ; PEMBERTON KIRK

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; KIRBY EADES GALE BAKER; MANLEY NICHOLAS MICHAEL; LEONARD TACHNER A PROFESSIONAL LAW CORP; LEONARD; TACHNER LEONARD

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): G09F13/04 G09F13/08 G09F15/00 G09F7/02 G09F7/04 G09F7/10 G09F7/18 (Advanced/Invention); G09F13/04 G09F15/00 G09F7/02 G09F7/18 (Core/Invention)

CPC: G09F13/04 G09F7/04 G09F7/10 G09F13/08

European class: G09F13/04 G09F13/08 G09F7/04

US class:

40/541 40/541P 40/564 40/568 40/575 40/576 40/600 40/600P 40/600S 40/606.19 40/606.190S 40/661.01

Classification Explorer

Cited documents: WO06060593, WO04079435, US7870687 BB, US7219460 BA, US7194831 BA, US6868630 BB, US6820360 BB, US6631576 BB, US6298591 BA, US6282825 BA, US6282825, US6182387 BA, US6182387, US6023870 A, US6003258 A, US5901486 A, US5579957 A, US5502907 A, US5457905 A, US5172503 A, US4976055 A, US4852284 A, US4837953 A, US4716671 A, US4475300 A, US4292752 A, US4111425 A, US3965599 A, US3444638 A, US2785490 A, US2007204500 AA, US2006117617 AA, US2005278999 AA, US2005028417, US2005005489 AA, US2001032404, JPS6216984 U, JPS6183212 U, JPS6166394 U, JPS6146579 U, JPS5944327 U, JPS55174456 U, JP8000360 U1, JP62016984 U1, JP61083212 U1, JP61066394 U1, JP61046579 U1, JP59044327 U1, JP55174456 U1, JP5010675 U1, JP3124598 U, JP3092629 U, JP2000503416, JP10116045 A2, GB2115592 A1,

Forward Citations: WO16109439, WO13066738, USD744040, US9461431, US9406247, US9355581, US9311836, US9247322, US9123263, US9118143, US9092967, US8779926, US8522464, US8205369, US2016348832, US2015181729, US2014373410, US2014290104, US2014187057, US2013169443, US2013160338, US2012096750, US2011083588, US2010024266, US2009084914, US2008297438, JP2011158682, GB2543966, FR2946449, EP2891839, EP2838077, EP2259248, CN103047588,

Abstract:
Source: US2008168691A A readily modifiable modular sign apparatus is especially useful for fast food restaurants as backlighted menu boards in both indoor and outdoor applications. The apparatus comprises a preferably translucent substrate or mounting board which is preferably planar and has a front surface and a back surface. Precisely positioned holes are prepared at selected locations. These holes are formed to be aligned with thin metal shims which are affixed on the back surface of the mounting board and receive cylindrical magnets on the front surface. The magnets are attached directly to the rear of printed sheets, each of which may have wording or pictorial information or both. The magnets contact the metal shims through the mounting board holes, and are held firmly in position by virtue of both the magnetic attractive force and the shape of the walls of the mounting board holes. The printed sheets may be provided with price carriers to permit personnel to change just food prices without the requirement to replace the entire printed sheet. In the preferred embodiment of the present invention, such price carriers are affixed directly to the front surface of the printed sheets in a unitary, integrated structure that provides easy access to the price indicia.

0) US2004065664A – OPENING ASSEMBLY

48) Family number: 13554049 (US2004065664A) © PatBase

Title: OPENING ASSEMBLY

Priority: GB20010003404 20010212 US20020467255 20020123 US20060392080 20060329 US20030467255 20030805 WO2002GB00274 20020123

Family:

Publication number	Publication date	Application number	Application date
AT327949 E	20060615	AT20020715552T	20020123
AU2002225199 AA	20020828	AU20020225199	20020123
AU2002225199 BB	20050929	AU20020225199	20020123
BRPI0207199 A	20040309	BR2002PI07199	20020123
BRPI0207199 B1	20130514	BR2002PI07199	20020123
CA2474445 AA	20040723	CA20022474445	20020123
CN1228214 C	20051123	CN20028004776	20020123
CN1496322 A	20040512	CN20028004776	20020123
DE60211861 D1	20060706	DE20026011861	20020123
DE60211861 T2	20061019	DE20026011861T	20020123
EP1365966 A1	20031203	EP20020715552	20020123
EP1365966 B1	20060531	EP20020715552	20020123
ES2260421 T3	20061101	ES20020715552T	20020123
GB200103404 A0	20010328	GB20010003404	20010212
IN01411CN2003 A	20051125	IN2003CN01411	20030908
IN213070 B	20080328	IN2003CN01411	20030908
JP2005500946 T2	20050113	JP20020564381T	20020123
JP4451064 B2	20100414	JP20020564381T	20020123
US2004065664 AA	20040408	US20030467255	20030805
US2006163253 AA	20060727	US20060392080	20060329
US7051896 BB	20060530	US20020467255	20020123
US7950542 BB	20110531	US20060392080	20060329
WO02064437 A1	20020822	WO2002GB00274	20020123
WO07126417 A2	20071108	WO2006US37303	20060925
WO07126417 A3	20090430	WO2006US37303	20060925
ZA200306716 A	20040519	ZA20030006716	20030828

Probable Assignee: STEADMAN WILLIAM D

Assignee(s):(std)**:** STEADMAN W D ; STEADMAN WILLIAM D ; STEADMAN WILLIAM DAVID

Assignee(s): W D STEADMAN ; WD STEADMAN ; WILLIAM DAVID STEADMAN

Inventor(s):(std)**:** STEADMAN WILLIAM D ; STEADMAN WILLIAM DAVID ; STEADMEN WILLIAM DAVID ; STEADMAN W D

Inventor(s): STEADMAN WILLIAM ; W D STEADMAN ; WD STEADMAN ; WILLIAM DAVID STEADMAN ; WILLIAM DAVID STEADMEN

Agent(s): PHILLIPS ORMONDE FITZPATRICK; RICHES MCKENZIE AND HERBERT LLP; WATTS HOFFMANN CO LPA; WATTTS HOFFMANN CO LPA; TAROLLI SUNDHEIM COVELL AND TUMMINO LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9):	A47G19/22 B65D17/34 B65D17/50 B65D39/04 B65D41/02 B65D41/06 B65D41/36 B65D5/72 B65D51/18 B65D55/16 (Advanced/Invention); B65D17/00 B65D17/28 B65D39/00 B65D41/02 B65D41/04 B65D41/34 B65D55/00 (Core/Invention)
International class (IPC 1–7):	A47G19/22 B65D B65D017/50 B65D17/50 B65D39/04 B65D41/02 B65D41/06
CPC:	B65D55/16 B65D2517/0043 B65D2517/0049 B65D2517/0062 B65D2517/0074 B65D2517/0098 B65D2517/5083 Y10S220/906 B65D17/506
European class:	B65D17/50B B65D55/16 L65D517/00Y5D2 L65D517/00Y6A L65D517/00Y7A1A L65D517/00Y7C L65D517/00Y9 L65D517/50Q5
US class:	220/254.7 220/254.700P 220/254.8 220/269 220/269S 220/270 220/294 220/304 220/705 220/705S 220/708 220/711 220/906

Classification Explorer

Cited documents:	WO9911523 A2, WO0105663 A2, US638258 A, US631907 A, US6138854 A, US6116446 A, US6106757 A, US5586681 A, US5443175 A, US5123561 A, US5080249 A, US4915252 A, US4747511 A, US4640435 A, US4605141 A, US4516683 A, US4265363 A, US4224017 A, US4179038 A, US4171057 A, US4043474 A, US3952911 A, US3945529 A, US3877604 A, US3843011 A, US3843001 A, US3784047 A, US3746197 A, US3704804 A, US3672547 A, US3659738 A, US3473692 A, US3331638 A, US3289881 A, US3262612 A, US3173566 A, US3106311 A, US2974824 A, US2749618 A, US2733052 A, US2002108922 AA, US2002088804 AA, GB638258 A, GB2342341 A1, GB2309682 A1, GB2254070 A1, GB2234426 A1, FR2651749 A1, FR2375101 A1, DE8336770 U,
Forward Citations:	WO16055928, WO15022518, USD696593, USD671834, US8931656, US8833585, US8720717, US8336728, US8336726, US8336725, US8240498, US7918359, US7891517, US7757889, US2012118889, US2011233227, US2010294768, US2009261101, US2009173737, US2009026201, US2008169299, US2008110887, US2007278239, US2007262079, US2007068943, GB2517205,

Abstract:
Source: US2004065664A A opening assembly (10) suitable for use on a can for containing carbonated beverages. The assembly (10) comprises a main part (14) with an oval opening (16). A flange (18) is provided around the underside of the opening (16), with a height inversely proportional to the diameter of the opening (16) at any point. A closure member (20) is provided comprising an upper part (14), cylindrical body part (30) which sliding fits through the opening (16), and an engagement member (34) on its underside. In a closed condition the engagement member (34) engages against the tallest part of the flange (18) to sealingly close the assembly (10). The closure member (20) can be rotated until the engagement member (34) is not engageable with the flange (18), and the member (20) can then be removed from the opening (16) to open the assembly (10). The member (20) can be replaced in the opening (16) and rotated to reclose the assembly (10).

0) US2005035080A – COMBINED BEVERAGE CONTAINER OPENER AND COVER

49) Family number: 31572009 (US2005035080A) © PatBase

Title: COMBINED BEVERAGE CONTAINER OPENER AND COVER

Priority: US20030641971 20030815 US20070881545 20070727

Family:

Publication number	Publication date	Application number	Application date
US2005035080 AA	20050217	US20030641971	20030815
US2008023433 AA	20080131	US20070881545	20070727
US8720714 BB	20140513	US20030641971	20030815

Probable Assignee: ROADRUNNER PROMOTIONS LLC

Assignee(s):(std)**:** ROADRUNNER PROMOTIONS LLC ; ROMERO JEROME

Inventor(s):(std)**:** ROMERO JEROME

Agent(s): LUIS M ORTIZ ORTIZ AND LOPEZ PLLC; ORTIZ AND LOPEZ PLLC REGISTERED PATENT ATTORNEYS; ORTIZ AND LOPEZ PLLC; KERMIT D; LUIS M

International class (IPC 8–9): B65D51/24 B67B7/18 B67B7/40 (Advanced/Invention); B67B7/00 (Core/Invention)

International class (IPC 1–7): B65D51/24

CPC: B67B7/18 B67B7/403

European class: B67B7/18 B67B7/40B

US class: 215/228 215/295 215/304 81/3.09 81/309

Classification Explorer

Cited documents: USD447923 S1, USD439482 S1, USD432375 S1, USD408236 S1, USD383954 S1, USD383953 S1, US6374419 BA, US5893301 A, US5483854 A, US4911038 A, US4829618 A, US4766781 A, US4760763 A, US4455894 A, US4433597 A, US4414865 A, US4337678 A, US3604290 A, US1916115 A, DE399108 A, DE383954 A,

Forward Citations: USD763685, USD754536, USD591117, USD567606, USD555996, USD519801, USD518693, USD518344, US9586733, US8701907, US8556095, US8434388, US8282514, US8272545, US7665607, US2016016704, US2012223044, US2012190487, US2012168399, US2011139745, US2010319494, US2008267713,

Abstract:
Source: US2005035080A A multi–purpose device is disclosed for opening beverage containers, such as glass bottles, plastic bottles and/or cans and for covering some open beverage containers having a neck, such as beverage bottles. The device includes a housing. The housing can represent various decorative forms of headgear. The housing includes a bottle cap remover and bottle retainer. For twist–off caps, a twist–off bottle cap remover can be provided that includes a cup–like guide member that can receive the cap of a beverage container. Ridges formed on and projecting outward from the surface of the cup–like guide member's inner circumference can be received by indentations between ridges typically found on the outer circumference of beverage container caps (e.g., bottle caps). By twisting the guide member, the twist–off cap becomes loosened for easy removal. The housing provides a user with the necessary leverage to facilitate application of twisting torque onto a twist–off bottle cap, or leverage necessary to pull a pop–off cap off of a bottle or cause a can–tab to perforate the upper surface of a can. The device can include at least one bottle cap opener (e.g. twist–off or pop–off) and a lift tab opener for standard soda can. The bottle retainer can be integrated within the decorative housing, should be formed of a flexible material that will enable the device to be retained at the neck of an opened beverage bottle, thereby enabling cover for an opened bottle.

50) Family number: 20369141 (US5756112A) © PatBase

Title: CARRIER SUBSTRATE TREATED WITH HIGH INTERNAL WATER PHASE INVERSE EMULSION MADE WITH AN ORGANOPOLYSILOXANE–POLYOXYALKYLENE EMULSIFIER

Priority: US19950430061 19950427 US19960759589 19961205 US19970846951 19970430 US19970767120 19970114 WO1996US04301 19960329

Family:

Publication number	Publication date	Application number	Application date
AR002991 A1	19980527	AR19960336298	19960426
AR002991 A1	19980527	AR19960102335	19960426
AR2991 A1	19980527	AR19960336298	19960426
AT177450 E	19990315	AT19960910634T	19960329
AU199653774 A1	19961118	AU19960053774	19960329
AU698551 B2	19981029	AU19960053774	19960329
BRPI9608101 A	19990209	BR1996PI08101	19960329
CA2218703 AA	19971020	CA19962218703	19960329
CA2218703 C	20020115	CA19962218703	19960329
CL1996000669 A1	19961226	CL19960000669	19960426
CN1068014 C	20010704	CN19961094974	19960329
CN1188490 A	19980722	CN19961094974	19960329
CO4440482 A1	19970507	CO19960020462	19960426
CZ289896 B6	20020417	CZ19970003425	19960329
CZ9703425 A3	19980218	CZ19970003425	19960329
DE69601705 D1	19990415	DE19966001705	19960329
DE69601705 T2	19990805	DE19966001705T	19960329
DK0822955 T3	19990927	DK19960910634T	19960329
EP0822955 A1	19980211	EP19960910634	19960329
EP0822955 B1	19990310	EP19960910634	19960329
ES2128850 T3	19990516	ES19960910634T	19960329
GR3029649 T3	19990630	GR19990400547T	19990311
HK1009143 A1	20000616	HK19980109849	19980811
HU9801443 AB	19980928	HU19980001443	19960329
HU9801443 AC	20011128	HU19980001443	19960329
IN186076 A	20010616	IN1996DE00804	19960416
JP11504325 T2	19990420	JP19960532523T	19960329
JP3353899 B2	20021203	JP19960532523T	19960329
KR100249611 B1	20000315	KR19970707624	19971027
KR19990008100 A	19990125	KR19970707624	19971027
MX9708256 A1	19980131	MX19970008256	19960329
NO309703 B1	20010319	NO19970004889	19971023
NO974889 A	19971229	NO19970004889	19971023
NO974889 A0	19971023	NO19970004889	19971023
PE57597 A1	19980225	PE19960000292	19960426
TH23148 A	19970121	TH19961001286	19960425
TR9701257 T1	19980321	TR19970001257T	19960329
TW418271 B	20010111	TW19960108692	19960717
US5756112 A	19980526	US19970767120	19970114
US5948540 A	19990907	US19970846951	19970430

WO9634035 A1	19961031	WO1996US04301	19960329	
ZA9603361 A	19961108	ZA19960003361	19960426	

Probable Assignee: PROCTER AND GAMBLE

Assignee(s):(std)**:** PROCTER AND GAMBLE ; THE PROCTOR AND GAMBLE COMPANY ; THE PROCTER AND GAMBLE COMPANY

Assignee(s): THE PROCTER AND GAMBLE CO CINCINNATI OHIO ; MACKEY LARRY NEIL ; PROCTER AND GAMBLE CO ; PROCTER AND GAMBLE CO THE ; PROCTOR AND GAMBLE CO ; THE PROCTER AND GAMBLE CO CINCINNATI OHIO US ; THE PROCTER AND GAMBLE CO

Inventor(s):(std)**:** LARRY NEIL MACKEY ; MACKEY LARRY ; MACKEY LARRY N ; MACKEY LARRY NEIL ; MACKEY NEIL LARRY ; TROKHAN PAUL DENNIS

Inventor(s): LARRY N MACKEY ; MACKEY LARRY NEIL FAIRFIELD OH 45014 US

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; SIM AND MCBURNEY; HARNECKER; CARLOS REINALDO OLARTE GARCIA

Designated states: AL AM AT AU AZ BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IS IT JP KE KG KP KR KZ LI LK LR LS LT LU LV MC MD MG MK ML MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG UZ VN

International class (IPC 8–9): A61F13/15 A61K7/50 A61K8/00 A61K8/02 A61K8/06 A61K8/89 A61K8/891 A61K8/894 A61K8/898 A61K8/92 A61K8/97 A61K8/98 A61L15/00 A61L15/26 A61Q19/10 C08J3/03 C08L83/12 D21H17/20 D21H19/18 D21H21/14 D21H21/22 (Advanced/Invention); A61K8/00 A61K8/92 B29C47/02 C08J3/03 (Advanced/Non–invention); A61F13/15 A61K8/00 A61K8/02 A61K8/04 A61K8/72 A61K8/92 A61K8/96 A61L15/00 A61Q19/10 C08J3/02 C08L83/00 (Core/Invention)

International class (IPC 1–7): A01N25/34 A27L25/00 A45D42/00 A61F13/00 A61F13/15 A61K7/00 A61K7/50 A61L15/00 A61L15/26 B32B9/04 C08J3/03 C08J3/075 D21H17/20 D21H19/18 D21H21/14 D21H21/22

CPC: C08J3/03 C08J2391/06 A61K8/894 A61K8/0208 A61K8/06 A61Q19/10 Y10T428/31663 Y10T428/31993

European class: A61K7/50Z4 A61K8/02C A61K8/06 A61K8/894 A61K8/898 A61Q19/10 C08J3/03 M08J391/06

US class: 424/402 424/443 424/70.12 424/78.03 427/21 427/387 428/447 428/537.5

Classification Explorer

Cited documents: WO9614835 A1, WO9516824 A1, WO9402120 A1, WO8703613 A2, US5534326 A, US5525345 A, US5503715 A, US5482703 A, US5470551 A, US5387417 A, US5378455 A, US5362482 A, US5292503 A, US5277761 A, US5247044 A, US5245025 A, US5210102 A, US5162378 A, US5136068 A, US5133972 A, US5047175 A, US5021405 A, US4875927 A, US4853474 A, US4844756 A, US4801447 A, US4782095 A, US4708753 A, US4698178 A, US4606913 A, US4520160 A, US4514345 A, US4513051 A, US4481243 A, US4468254 A, US4446051 A, US4421656 A, US4385049 A, US4381241 A, US4377649 A, US4339276 A, US4293611 A, US4246423 A, US4203877 A, US4137358 A, US4122029 A, US4117199 A, US4112167 A, US4104403 A, US4082887 A, US4043829 A, US3982993 A, US3965518 A, US3919149 A, US3896807 A, US3847637 A, US3819530 A, US3818533 A, US3231587 A, US3215707 A, US2868824 A, JP59144426 A2, JP5070337 A2, JP3168118 A2, JP2152920 A2, IN155758, GB2113236 A1, GB2055689 A1, GB1059541 A, FR2321389 A1, EP0631774 A1, EP0545002 A1, EP0501791 A2, EP0365160 A2, EP0259034 A2, EP0110678 A2, DE3341770 A1, CA1132908 A1,

Forward Citations: WO9937747, WO9912519, WO9906523, WO9901536, WO9824871, WO9824871, WO9740814, WO12145615, WO12145602, WO12145461, WO12145345, WO07144819, WO07144814, WO04050995, WO04016240, WO0154552, US9539288, US9464274, US9394637, US9254302, US9216200, US9200253, US9198938, US9149569, US9139813, US9121007, US9119779, US9078898, US9040035, US8969315, US8926964, US8916146, US8895256, US8828376, US8753883, US8728805, US8691217, US8617535, US8591883, US8580563, US8578543, US8562973, US8551518, US8545861, US8545833, US8495784, US8460650, US8455250, US8435788, US8367568, US8367409, US8293223, US8263065, US8221774, US8216566, US8202703, US8057789, US8057788, US8030226, US7976836, US7951127, US7943123, US7700090, US7691760, US7682803, US7629043, US7468276, US7423003, US7396593, US7348018, US7311905, US7306813,

US7276459, US7255879, US7115551, US7115535, US7101612, US7101460, US7070854, US7029756, US6986897, US6977026, US6964725, US6949168, US6908966, US6905697, US6897168, US6896766, US6860967, US6855790, US6835678, US6828014, US6815502, US6814974, US6797357, US6790794, US6716514, US6713414, US6683143, US6683041, US6660109, US6653406, US6630558, US6616641, US6599848, US6586529, US6579570, US6548592, US6495151, US6491933, US6491928, US6444214, US6338855, US6332936, US6322801, US6300258, US6296936, US6293987, US6287582, US6280757, US6267975, US6217889, US6190678, US6180214, US6168852, US6153208, US6133166, US6132746, US6121165, US6117420, US6074655, US6063397, US5980931, US5972361, US5952043, US5951991, US5914177, US2010261394, US2010139021, US2008147027, US2007286894, US2007286893, US2007190878, US2006141881, US2006130989, US2004234804, US2004147189, US2004118532, US2004099392, US2004084165, US2004074622, US2004072488, US2003171051, KR20120102727, KR20120005457, KR101718556, KR101627304, JP4808808, JP2009539466, JP2009539465, GB2481764, EP1408155, EP1064909, EP1064909, DE19924276, DE10234256, DE10049042, DE10049041,

Abstract:
Source: US5756112A Wet−like cleaning wipes and similar articles that are particularly useful in removing perianal soils. These wipes comprise a carrier substrate such as tissue paper web that is treated with a high internal water phase inverse emulsion made with an organopolysiloxane−polyoxyalkylene emulsifier. The organopolysiloxane−polyoxyalkylene emulsifiers provide better water retention than other organic emulsifiers used in formulating high internal phase inverse emulsions, as well as better hand feel aesthetics for the wipe treated with the emulsion.

0) US5653671A – CARTON FEEDER ASSEMBLY

51) Family number: 42123918 (US5653671A) © PatBase

Title: CARTON FEEDER ASSEMBLY

Priority: US19940367459 19941230 WO1995US14358 19951102

Family:

Publication number	Publication date	Application number	Application date
AR000584 A1	19970710	AR19950334863	19951228
AT213200 E	20020215	AT19950939775T	19951102
AU199641464 A1	19960724	AU19960041464	19951102
AU694294 B2	19980716	AU19960041464	19951102
BRPI9506597 A	19970909	BR1995PI06597	19951102
CA2182706 AA	19960802	CA19952182706	19951102
CL1995002044 A1	19961023	CL19950002044	19951228
CO4440645 A1	19970507	CO19950061028	19951222
DE69525447 D1	20020321	DE19956025447	19951102
EP0748277 A1	19961218	EP19950939775	19951102
EP0748277 A4	19980930	EP19950939775	19951102
EP0748277 B1	20020213	EP19950939775	19951102
FI962265 A	19960701	FI19960002265	19960530
FI962265 A0	19960530	FI19960002265	19960530
IL116619 A0	19960331	IL19950116619	19951229
JP9509910 T2	19971007	JP19960520958T	19951102
KR19960704697 A	19961009	KR19960701830	19960408
MX9505267 A1	19970131	MX19950005267	19951214
NO963616 A	19960829	NO19960003616	19960829
NO963616 A0	19960829	NO19960003616	19960829
NZ296768 A	19980427	NZ19950296768	19951102
US5653671 A	19970805	US19940367459	19941230
WO9620826 A1	19960711	WO1995US14358	19951102
ZA9511028 A	19960711	ZA19950011028	19951228

Probable Assignee: RIVERWOOD INT CORP

Assignee(s):(std)**:** RIVERWOOD INT CORP

Assignee(s): GRAPHIC PACKAGING INT ; RIVERWOOD INT ; GRAPHIC PACKAGING INT INC ; JPMORGAN CHASE BANK ADMINISTRATIVE AGENT AS ; RIVERWOOD INT USA INC ; RIVERWOOD INT CORP ATLANTA ; REUTELER URS ; CHEMICAL BANK AS ADMINISTRATIVE AGENT ; JPMORGAN CHASE BANK AS ADMINISTRATIVE AGENT ; RIVERWOOD INT CORPORACION DEL ESTADO DE DELAWARE CORP ; BANK OF AMERICA NA ; BANK OF AMERICA NA ADMINISTRATIVE AGENT AS ; CHASE MANHATTAN BANK ; CHASE MANHATTAN BANK ADMINISTRATIVE AGENT AS ; CHASE MANHATTAN BANK AS ADMINISTRATIVE AGENT ; CHEMICAL BANK ADMINISTRATIVE AGENT AS

Inventor(s):(std)**:** REUTELER URS ; REUTERLER URS

Inventor(s): URS REUTELER ; URS REUTERLER

Agent(s): PHILLIPS ORMONDE FITZPATRICK; MACRAE AND CO; VILLASECA; XIMENA CASTELLANOS ABONDANO

Designated states: AT AU BE BR CA CH DE DK ES FI FR GB GR IE IT JP KR LI LU MC NL NO NZ PT SE

International class (IPC 8–9)**:** B31B1/02 B31B1/74 B31B1/76 B31B1/80 B31B5/80 B65B43/00 B65H1/24 B65H3/08 B65H3/10 B65H3/42 (Advanced/Invention);
B31B1/00 (Advanced/Non–invention);
B31B1/00 B31B1/74 B31B5/00 B65B43/00 B65H1/08 B65H3/00 B65H3/08 (Core/Invention)

International class (IPC 1–7):	B31B1/76 B31B1/80 B31B3/00 B65B1/00 B65B43/00 B65B43/42 B65H3/08 B65H3/10
CPC:	B31B2201/0247 B65H3/42 B31B2201/027 B31B2201/0294 B31B2201/287 B31B2201/289 B31B2201/95 B31B2203/003 B65H1/24 B65H3/0808
European class:	B31B1/02 B31B1/06 B31B1/74 B31B1/80 B65H1/24 B65H3/08B B65H3/42 L31B201/02 L31B201/02B5A L31B201/02C1 L31B201/28B L31B201/28B2 L31B201/95 L31B203/00A
US class:	271/150 271/3.12 271/95 493/313 493/315 53/381.1 53/564
Classification Explorer	
Cited documents:	US5482267 A, US5456570 A, US5415615 A, US5279095 A, US5131899 A, US5104369 A, US5029834 A, US4934682 A, US4596545 A, US4596544 A, US4211153 A, US3858490 A, US3783752 A, US3728945 A, US3293998 A, US2936681 A, US1033968 A, US1033968, EP0331325 A1, EP0034797 A2, CA479901 A, AU584804 B2,
Forward Citations:	WO17060375, WO15091977, WO14004429, WO02060678, WO02060678, WO0103913, WO0022490, US9409367, US9334133, US9102481, US8870519, US8868231, US8356706, US8302955, US7708678, US7367445, US7329218, US7328561, US7310925, US7156605, US6901721, US6612974, US6575886, US6311457, US6296601, US5860269, US5850725, US2012138429, US2008261793, US2007072756, US2007069455, US2007063416, US2007001391, US2006240962, US2003205025, US2003045415, US2002103068, KR200467357, EP2524883, EP2524883,

Abstract:
Source: US5653671A A carton feeder assembly is positioned substantially at the infeed conveyor level and includes a carton supply assembly, a carton selector, a carton opener, and a carton erector. The carton supply assembly has a carton supply position, a carton holding position, and a carton selecting position. The carton selector includes a pair of feeder wheels with corresponding suction devices and respective motion defining assemblies. The motion defining assemblies cause the suction devices to move along a linear pick line as the feeder wheels rotate, so that the suction devices can apply a suction on a carton to be selected. The selected carton is brought into contact with the feeder wheels by retraction of the suction devices caused by respective motion defining assemblies, so that the carton moves with the feeder wheels to the carton opener. The carton opener includes a vacuum belt which applies suction to one surface of the selected carton as a carton opening wheel applies a suction to a second side of the selected carton. As the vacuum belt moves the carton in a linear direction, the carton opening wheel rotates the second side of the carton so that the carton opens. The vacuum belt then feeds the opened carton into leading lugs on respective chains of the carton erector. Trailing lugs rotate into position behind the opened carton to hold the carton in an erect position suitable for loading the carton with articles such as bottles or cans.

0) US2001013190A – REMOVABLE DISPLAY SURFACE

52) Family number: 28112940 (US2001013190A) © PatBase

Title: REMOVABLE DISPLAY SURFACE

Priority: CA19982243417 19980720 CA19982243417 19980720 US19970897749 19970721 US20050311694 20051219 US20050311704 20051219 US20030422353 20030423 US20010821681 20010329 US20030459392 20030609 US20020387691P 20020610 US20080079604 20080327 US20080079603 20080327

Family:

Publication number	Publication date	Application number	Application date
CA2243417 AA	19990121	CA19982243417	19980720
CA2243417 C	20041123	CA19982243417	19980720
US2001013190 AA	20010816	US20010821681	20010329
US2004049957 AA	20040318	US20030422353	20030423
US2004068901 AA	20040415	US20030459392	20030609
US2006156603 AA	20060720	US20050311694	20051219
US2006191175 AA	20060831	US20050311704	20051219
US2008289232 AA	20081127	US20080079604	20080327
US2008301991 AA	20081211	US20080079603	20080327
US6250005 BA	20010626	US19970897749	19970721
US6578303 BB	20030617	US20010821681	20010329
US7263790 BB	20070904	US20030459392	20030609

Probable Assignee: RICHARDS ERIC W

Assignee(s):(std)**:** RICHARDS ERIC W

Inventor(s):(std)**:** RICHARDS ERIC W

Inventor(s): RICHARDS ERIC

Agent(s): SMART AND BIGGAR; PATRICK M DWYER PC SUITE 114; PATRICK M DWYER PC; PATRICK M

International class (IPC 8–9)**:** B65D23/08 B65D25/36 G09F15/00 G09F23/00 G09F23/06 G09F3/00 G09F3/04 G09F3/10 G09F3/14 (Advanced/Invention)

International class (IPC 1–7)**:** B65D23/08 B65D25/34 B65D25/36 B65D65/08 G09F23/00 G09F23/06 G09F3/00 G09F3/14

CPC: Y10S150/901 G09F23/06 B65D25/36 B65D2203/00 G09F15/0025 G09F23/00 Y10T24/45215 Y10T24/45241 Y02W30/807

European class: B65D25/36 G09F15/00B4 G09F23/00 G09F23/06 L65D203/00

US class: 150/901 215/12.1 220/739 229/403 24/589.1 24/593.1 40/306 40/306P 40/311 40/311P 40/324 40/324P 40/360 40/360P 40/637 40/637P 40/655 40/655S 40/665 40/665P 40/665S 40/668

Classification Explorer

Cited documents: USD381865 S1, USD354420 S1, US6932782 BB, US6718733 BB, US6578303 BB, US6408336 BA, US6295920 BA, US6286754 BA, US6264361 BA, US6250545 BA, US6250005 BA, US6196287 BA, US6182855 BA, US6079316 A, US6073796 A, US6019540 A, US5927524 A, US5918316 A, US5915580 A, US5902659 A, US587312 A, US5857615 A, US5845804 A, US5826786 A, US5809867 A, US5788076 A, US5787427 A, US5746372 A, US5711836 A, US5704144 A, US5680944 A, US5676401 A, US5669553 A, US5622389 A, US5609265 A, US5593041 A, US5562048 A, US5503325 A, US5454492 A, US5448844 A, US5425497 A, US5358770 A, US5325991 A, US5322578 A, US5318821 A, US5256131 A, US5213253 A, US5209367 A, US5169025 A, US5163608 A, US5131177 A, US5102036 A, US5078817 A, US5065879 A, US5007566 A, US4984707 A, US4977697 A, US4955153 A, US4923557 A, US4884704 A, US4871597 A, US4846394 A, US4834250 A, US4778545 A, US4763930 A, US4727667 A, US4612718 A, US4583577 A, US4526280 A, US4511616 A, US4491494 A, US4478265 A, US4410245 A, US4401245 A, US4399668 A, US4282279 A, US4268567 A, US4215498 A, US4190168 A, US4181765 A, US3967995 A, US3967993

A, US3941159 A, US3829348 A, US3826026 A, US3813801 A, US3760968 A, US3680726 A, US3654049 A, US3618243 A, US3092277 A, US2745569 A, US2490250 A, US2409820 A, US2384274 A, US2376194 A, US2367194 A, US228002 A, US2240072 A, US2214436 A, US2161935 A, US2135830 A, US2127342 A, US2123610 A, US2081152 A, US2063553 A, US2003088786 AA, US1837495 A, US1829915 A, US1647169 A, US1632347 A,

Forward Citations: WO08016383, WO08016383, WO07020376, USD786979, USD777842, USD765789, USD744045, USD724901, USD722003, USD706203, USD655137, USD632655, USD628260, USD621704, USD619891, USD616742, USD594708, USD594707, USD594686, USD579770, USD500343, USD498644, US9586747, US9452248, US9446178, US9433310, US9211365, US8960528, US8651365, US8628505, US8579148, US8569566, US8545464, US8534952, US8181371, US8177118, US8020359, US7922031, US7921583, US7874429, US7856741, US7795769, US7546702, US7523576, US7263790, US6883430, US6578303, US6575328, US6410099, US2015151895, US2014326627, US2013022777, US2012080654, US2011185606, US2011166946, US2010320262, US2010281833, US2009302047, US2009242452, US2009194172, US2009071581, US2008307677, US2008241487, US2008236475, US2008210586, US2008190949, US2008093428, US2008089791, US2008083146, US2008066353, US2008010874, US2007289938, US2007169388, US2007144929, US2007131741, US2007095193, US2007011925, US2006278550, US2006222828, US2006185210, US2006060098, US2006028015, US2005060924, US2005035018, US2005035011, US2004241432, US2004094549, US2004068901, US2003173326, US2003105665, NL1031133, EP2684811, EP1818154, EP1792836, DE102008057402,

Abstract:
Source: US2001013190A A precisely measured removable cover for reusable beverage containers. A covering of independently resilient material is precisely cut to fit a given size and shape of pot, and the material has imprinted on it a desired promotional or advertising message and/or graphics. The covering material is removably fastened with releasable closures to the outside of the pot in such a way as not to impair significantly the natural independent resiliency of the material. Thus, dents in the pot do not generally show in the covering surface because it retains its independent resiliency, even if the blow was delivered through the covering surface. Messages may be changed as often as suits the promotional and decorative needs of the owner of the pot, so the display surface is always timely and in top condition. An optional "window" permits display of interchangeable labels on the inside of the covering. When the display surface is fully removed, the original surface of the pot is substantially restored to its former appearance. Optionally, a protective plastic covering or overlaminant is attached to the print side of the covering material, so that when the printed cover is in its removed state, the printing will not be accidentally damaged by scratching. Some embodiments employ a nylon fabric cover material with promotional printing.

0) US2013246136A – DEVICE, SYSTEM AND METHOD FOR FACILITATING INTE...

53) Family number: 52839383 (US2013246136A) © PatBase

Title: DEVICE, SYSTEM AND METHOD FOR FACILITATING INTERACTION BETWEEN A WIRELESS COMMUNCATION DEVICE AND A PACKAGE

Priority: GB20120020373 20121112 US20120611222P 20120315 US20120612064P 20120316 US20130827003 20130314 WO2013US31359 20130314 US20160065207 20160309

Family:

Publication number	Publication date	Application number	Application date
CA2867453 AA	20140915	CA20132867453	20130314
CN104756146 A	20150701	CN201380025274	20130314
EP2826007 A2	20150121	EP20130713012	20130314
GB201220373 A0	20121226	GB20120020373	20121112
GB2507810 A1	20140514	GB20120020373	20121112
HK1206469 A1	20160108	HK20150106891	20150720
JP2015522856 T2	20150806	JP20150500612T	20130314
RU2014141503 A	20160510	RU20140141503	20130314
US2013246136 AA	20130919	US20130827003	20130314
US2016292697 AA	20161006	US20160065207	20160309
WO13138595 A2	20130919	WO2013US31359	20130314
WO13138595 A3	20140410	WO2013US31359	20130314
WO14072455 A2	20140515	WO2013EP73348	20131108
WO14072455 A3	20140731	WO2013EP73348	20131108

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING UK PLC ; CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC

Assignee(s): CROWN PACKAGING TECHNOLOGY INC11535 SOUTH CENTRAL AVENUEALSIPIL60803–2599US ; DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; MCGRILL LAURA JANE ; RAMSEY CHRISTOPHER PAUL ; MCGIRR LAURA JANE ; VAUGHAN LAURA JANE

Inventor(s):(std)**:** MCGIRR LAURA JANE ; MCGRILL LAURA JANE ; RAMSEY CHRISTOPHER PAUL ; VAUGHAN LAURA JANE ; VAUGHN LAURA JANE

Inventor(s): RAMSEY CHRISTOPHER PAULGB ; MCGRILL LAURA JANEGB ; MCGIRR LAURA JANEGB ; CHRISTOPHER PAUL RAMSEY ; LAURA JANE MCGIRR

Agent(s): GOWLING LAFLEUR HENDERSON LLP; LIND ROBERT; INO SARI; KURASAWA ICHIRO; MATSUSHITA MITSURU; DESHIMARU TAKESHI; KUMAKURA YOSHIO; FULLMER HAROLD H ET AL; RATLIFF ISMAY ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A63F13/00 A63F13/213 A63F13/216 B42D15/00 B65D1/12 B65D1/22 B65D17/00 B65D25/20 B65D41/12 B65D41/32 B65D85/00 G06F3/048 G06K19/06 G06K7/10 G06K7/14 G06Q10/08 G06Q20/32 G06Q30/00 G06Q30/02 G06Q30/06 H04W4/02 (Advanced/Invention); G06Q (Subclass/Invention)

CPC: B65D85/00 G06Q20/3276 G06Q30/02 B65D41/32 B42D15/00 B65D1/12 B65D1/22 B65D17/16 B65D17/24 B65D17/163 B65D17/165 B65D41/12 B65D2203/00 B65D2517/0052 B65D2517/0053 Y10T29/49 G09F3/0297 G06Q30/018 G06Q10/0835 H04W4/021 G06K19/06037 G06K7/10861 G06Q30/0643

US class: 206/459.1 235/375 29/592 463/29 705/14.12 705/26.7 705/27.1 705/306 705/317

Classification Explorer

Cited documents: WO13138595 A2, WO13049313 A2, WO12177077 A2, WO11107895 A1, WO05026017 A1, US8708221 BA, US6677967 BB, US6250554 BA, US6155409 A, US5939699 A, US2012219179 AA, US2012196661 AA, US2012172127 AA, US2012152781 AA, US2012085829 AA, US2011313918 AA, US2010315439 AA, US2010102117 AA, US2009319181 AA, US2009234731 AA, US2009089705 AA, US2007218980 AA, US2006181510 AA, US2005039092 AA, US2004104141 AA, US2002161640 AA, US2002056756 AA, JP3100125 U1, JP2011118600 A2, JP2011016546 A2, JP2011011454 A2, JP2010167571 A2, JP2009116525 A2, JP2006168735 A2, JP2005182416 A2, JP2005070725 A2, JP2004287037 A2, JP2004213629 A2, JP2003150745 A2, JP2002511696 T2, JP2002279268 A2, JP2002037420 A2, JP11248552 A2, GB2390592 A1, GB2354360 A1, EP1560009 A1,

DE102009027862 A1

CN101951592 A, CN101950200 A, CN101908155 A,

Forward Citations: WO15162729, WO14072455, WO14072455, US9665887, US9340368, US9259913, US2014019238, CN105691824, CN105600117, CN105501616,

Abstract:
Source: US2013246136A A method of providing a personalized experience on a wireless communication device corresponding to the contents of a package, the package containing a product may include the steps of reading a unique code on a package, the package containing a product, displaying a personalized illusory images on the wireless communication device, and altering the personalized illusory images in response to relative movement between the package and the camera.

0) US6120783A – WEB MATERIALS WITH TWO OR MORE SKIN CARE COMPOS...

54) Family number: 29596778 (US6120783A) © PatBase

Title: Web materials with two or more skin care compositions disposed thereon and articles made therefrom

Priority: KR20007004658 20000428 US19970961879 19971021 US19970961879 19971031 US20000533005 20000322 WO1998US22057 19981019

Family:

Publication number	Publication date	Application number	Application date
AR017178 AA	20010822	AR1998P105467	19981030
AT247445 E	20030915	AT19980952373T	19981019
AU199898091 A1	19990524	AU19980098091	19981019
BRPI9814836 A	20001003	BR1998PI14836	19981019
CA2305551 AA	20000403	CA19982305551	19981019
CA2305551 C	20040525	CA19982305551	19981019
CL1998002611 A1	19990430	CL19980002611	19981030
CN1283094 A	20010207	CN19988012659	19981019
CN1315446 C	20070516	CN19988012659	19981019
CO5070626 A1	20010828	CO19980064545	19981103
DE69817388 D1	20030925	DE19986017388	19981019
DE69817388 T2	20040624	DE19986017388T	19981019
EG22469 A	20030226	EG19980001339	19981031
EP1027022 A1	20000816	EP19980952373	19981019
EP1027022 B1	20030820	EP19980952373	19981019
ES2205564 T3	20040501	ES19980952373T	19981019
IL135455 A0	20010520	IL19980135455	19981019
JP2001521994 T2	20011113	JP20000518625T	19981019
JP4463419 B2	20100519	JP20000518625T	19981019
KR100476911 B1	20050317	KR20007004658	19981019
KR20010031607 A	20010416	KR20007004658	20000428
PE126599 A1	20000213	PE19980001001	19981023
TH34274 A	19990806	TH19981004174	19981029
TW539554 B	20030701	TW19980118141	19990208
US6120783 A	20000919	US19970961879	19971031
US6290979 BA	20010918	US20000533005	20000322
WO9922684 A1	19990514	WO1998US22057	19981019
ZA9809697 A	19990429	ZA19980009697	19981023

Probable Assignee: PROCTER AND GAMBLE

Assignee(s):(std)**:** PROCTER AND GAMBLE ; PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE COMPANY

Assignee(s): THE PROCTER AND GAMBLE CO ; THE PROCTER AND GAMBLE COMPANY CINCINNATI ; VANRIJSWIJCK LAURA GRAVES SPALDING ; ROE DONALD CARROLL ; SCHULTE THOMAS EDWARD ; ELDER GRETCHEN LOUISE ; GAMBLE CO ; MILLER STEVEN WORTHINGTON ; PROCTER AND

Inventor(s):(std)**:** DONALD CAROLL ROE ; DONALD CARROLL ROE ; ELDER GRETCHEN L ; ELDER GRETCHEN LOUISE ; ELDER LOUISE ; GRETCHEN L ELDER ; GRETCHEN LOUISE ELDER ; LAURA GRAVES SPALDING VANRIJSWIJCK ; MILLER STEVEN WORTHINGTON ; MILLER WORTHINGTON ; ROE CARROLL ; ROE DONALD C ; ROE DONALD CARROLL ; SCHULTE DONALD C ROE GRETCHEN ; SCHULTE EDWARD ; SCHULTE THOMAS E ; SCHULTE THOMAS EDWARD ; SPALDING VAN RIJSWIJCK LAURA G ; STEVEN WORTHINGTON MILLER ; STEVEN WORTHINTON MILLER ; THOMAS E SCHULTE ; THOMAS EDWARD SCHULTE ; VANRIJSWIJCK GRAVES ; VANRIJSWIJCK LAURA GRAVES SPAL ; VANRIJSWIJCK LAURA GRAVES SPALDING

; VANRIJSWIJCK LAURA ; VAN RIJSWIJCK LAURA GRAVES SPALDING ; ROE DONALD CAROLL ; MILLER STEVEN WORTHINTON ; MILLER STEVEN ; HULTE THOMAS EDWARD ; GRAVES SPALDING VANRIJSWIJCK LAURA ; DONALD C ROE

Inventor(s): DONALD C ROE GRETCHEN L ELDER THOMAS E SCHULTE ; THOMAS EDWARD HULTE ; ROE DONALD CARROL ; VANRIJSWIJCK LAURA GRAVES ; SPALDING VAN RIJSWIJCK LAURA GRAVES

Agent(s): SIM AND MCBURNEY; HARNECKER; CARLOS REINALDO OLARTE GARCIA

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GE GH GM GN GR GW HR HU ID IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG UZ VN YU ZW

International class (IPC 8–9): A61F13/15 A61F13/472 A61F13/49 A61F13/511 A61F5/44 A61L15/16 A61L15/34 D06M13/00 (Advanced/Invention); A61F13/15 A61F5/44 D06M13/00 (Advanced/Non–invention); A61F13/15 A61F5/44 D06M13/00 (Core/Invention)

International class (IPC 1–7): A61F13/15 A61F13/472 A61F13/49 A61F13/511 A61F5/44 A61K9/70 A61L15/16 D06M13/00

CPC: A61F13/8405

European class: A61F13/84B

US class: 424/402 424/404 424/443 604/364

Classification Explorer

Cited documents: WO9824390 A2, WO9503765 A2, WO9407450 A1, US6120783 A, US5998695 A, US5938649 A, US5871763 A, US5656591 A, US5649917 A, US5643588 A, US5635191 A, US5624676 A, US5609587 A, US5607760 A, US5582605 A, US5580411 A, US5571096 A, US5569234 A, US5569232 A, US5569230 A, US5554143 A, US5525346 A, US5151092 A, US5026364 A, US4988344 A, US4842666 A, US4834737 A, US4795454 A, US4785996 A, US4753643 A, US4695278 A, US4636207 A, US4623339 A, US4589876 A, US4573986 A, US3911173 A, US3896807 A, US3860003 A, US3814101 A, US3489148 A, DE3830056 A1,

Forward Citations: WO15156954, WO08073274, WO07064264, WO04060224, WO04024044, WO03034965, WO03034965, WO03002698, WO0072892, WO0071177, WO0069485, WO0069484, WO0069483, WO0069482, WO0069481, USRE45716, US9662250, US9522089, US9517168, US9510979, US9498391, US9498390, US9498389, US9238348, US9101680, US9040472, US9035123, US8697938, US8697937, US8664467, US8558053, US8552251, US8491558, US8454570, US8449507, US8420883, US8378168, US8348918, US8283515, US8262638, US8262305, US8217220, US8182457, US8172820, US8138388, US8057450, US8053626, US8044256, US8043984, US8007614, US7943813, US7938812, US7923505, US7896858, US7867211, US7858840, US7851668, US7803147, US7789867, US7785311, US7626072, US7601657, US7537587, US7491863, US7481801, US7462173, US7458961, US7388123, US7345215, US7335273, US7316842, US7316840, US7255763, US7195771, US7195685, US7045030, US7015155, US7005557, US6978486, US6967178, US6939553, US6939334, US6902796, US6733773, US6692603, US6686303, US6627787, US6624340, US6617490, US6603053, US6548732, US6503525, US6482422, US6476288, US6290979, US6215038, US2016213530, US2012231988, US2011190186, US2011092938, US2010324526, US2010324525, US2010324522, US2009241277, US2009162446, US2009155325, US2009118693, US2009062753, US2008287900, US2008287896, US2008286320, US2008286224, US2008249491, US2008119816, US2008119815, US2008119814, US2008119813, US2007130706, US2006269509, US2006264879, US2006264876, US2006264875, US2006264873, US2006264872, US2006264871, US2006264868, US2006264866, US2006264865, US2006195178, US2006121097, US2006069370, US2006035055, US2005208112, US2005165375, US2005054253, US2005039837, US2004199136, US2004193126, US2004158216, US2004158215, US2004140048, US2004127883, US2004127877, US2004122390, US2004122386, US2004064117, US2004059309, US2004024374, US2004006323, US2003149411, US2003090020, US2003084914, US2003082970, US2003077307, US2002058056, US2001044610, US2001009991, TWI320706, TWI317632, SG103833, KR100775401, JP4698844, JP2012110414, JP2010104722, JP2003524470, JP2003510132, FR2802803, EP1444970, EP1444969, EP1358863, EP1178844, EP1153617, AU775759,

Abstract:
Source: US6120783A Web materials which have two or more skin care compositions disposed thereon. The skin care compositions are transferable to the wearer's skin by normal contact and/or wearer motion and/or body heat. The skin care compositions disclosed in the present invention are selected to maintain and/or improve the skin

health of the wearer upon transfer during use, for example, to provide a skin protective barrier or a therapeutic benefit; to minimize the abrasion between the cuffs and skin in the area where the cuffs contact the wearer's skin, resulting in less skin irritation; to improve BM clean up on the skin, or to improve the barrier properties of the cuffs. Web materials of the present invention have a wide range of potential uses in both durable and disposable articles, but are particularly well suited for use in disposable absorbent articles such as disposable diapers, incontinent briefs, training pants, sanitary napkins, and the like.

55) Family number: 31020643 (US4046329A) © PatBase

Title: METHOD AND APPARATUS FOR PACKAGING LINEAR MATERIAL

Priority:

CH19760005861 19760508
GB19760026206 19760623
GB19750024534 19750607
GB19780025927 19760623
US19750590736 19750626
US19750590756 19750626
GB19750019469 19750508
GB19760094278 19760507
GB19750036946 19750909
GB19760094478 19760507
US19750590741 19750626
GB19770019469 19770510
GB19750024533 19750607
GB19750036496 19750904
GB19750049150 19751129
GB19760094678 19760507
US19750590742 19750626

Family:

Publication number	Publication date	Application number	Application date
AT770676 A	19821215	AT19760007706	19761015
AU197613777 A1	19771117	AU19760013777	19760510
AU197614606 A1	19771208	AU19760014606	19760603
AU501788 B2	19790628	AU19760014606	19760603
AU510929 B2	19800724	AU19760013777	19760510
BE841587 A1	19760901	BE19760166843	19760507
BE843282 A1	19761223	BE19760168201	19760623
BR7602920 A	19761123	BR19760002920	19760510
BR7604098 A	19770726	BR19760004098	19760624
CA1027915 A1	19780314	CA19760254521	19760610
CA1063745 A1	19791002	CA19760252170	19760507
CH628661 A	19820315	CH19760005861	19760508
CH630939 A	19820715	CH19810005284	19810817
DE2620489 A1	19770407	DE19762620489	19760508
DE2627947 A1	19770113	DE19762627947	19760622
DK203876 A	19761109	DK19760002038	19760507
DK287876 A	19761227	DK19760002878	19760625
ES446138 A1	19771001	ES19760446138	19760317
ES446139 A1	19771001	ES19760446139	19760317
FI60688 B	19811130	FI19760001857	19760624
FI60688 C	19820310	FI19760001857	19760624
FI66886 B	19840831	FI19760001298	19760507
FI66886 C	19841210	FI19760001298	19760507
FI761298 A	19761109	FI19760001298	19760507
FI761857 A	19761227	FI19760001857	19760624
FR2317384 A1	19770204	FR19760019323	19760625
FR2317384 B1	19810213	FR19760019323	19760625
GB1554141 A	19791017	GB19760026206	19760623
GB1554142 A	19791017	GB19780025927	19760623
GB1554143 A	19791017	GB19750019469	19750508
GB1554144 A	19791017	GB19750024534	19750607
GB1554145 A	19791017	GB19750036946	19750909
GB1554146 A	19791017	GB19750049150	19751129
GB1554147 A	19791017	GB19760094278	19760507
GB1554148 A	19791017	GB19760094478	19760507
GB1554149 A	19791017	GB19760094678	19760507
IT1061041 A	19821020	IT19760023084	19760507
IT1079539 A	19850513	IT19760024758	19760625
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JP52136281 A2	19771114	JP19760052768	19760508
JP56052827 B4	19811215	JP19760071684	19760617
NL7604935 A	19761110	NL19760004935	19760507
NL7607024 A	19761228	NL19760007024	19760625
NO144294 B	19810427	NO19760002216	19760625
NO144294 C	19810805	NO19760002216	19760625
NO761538 A	19761109	NO19760001538	19760505
NO762216 A	19761228	NO19760002216	19760625
PH14159 A	19810312	PH19760018429	19760512
PT65079 A	19760601	PT19760065079	19760507
PT65079 B	19770913	PT19760065079	19760507
SE429021 B	19830808	SE19760005128	19760505
SE429021 C	19831117	SE19760005128	19760505
SE429627 B	19830919	SE19800004760	19800627
SE429627 C	19840105	SE19800004760	19800627
SE429830 B	19831003	SE19800004761	19800627
SE429830 C	19840112	SE19800004761	19800627
SE437818 B	19850318	SE19760007195	19760623
SE437818 C	19850627	SE19760007195	19760623
SE7605128 A	19761109	SE19760005128D	19760505
SE7605128 L	19761109	SE19760005128	19760505
SE7607195 A	19761227	SE19760007195	19760623
SE8004760 A	19800627	SE19800004760D	19800627
SE8004761 A	19800627	SE19800004761D	19800627
US4046329 A	19770906	US19750590741	19750626
US4054249 A	19771018	US19750590742	19750626
US4069984 A	19780124	US19750590736	19750626
US4085901 A	19780425	US19770801191	19770527
US4447479 A	19840508	US19800201557	19801028
ZA7602701 A	19770525	ZA19760002701	19760505
ZA7603434 A	19770525	ZA19760003434	19760609

Probable Assignee: PLASTONA WADDINGTON LTD JOHN

Assignee(s):(std)**:** OWENS CORNING FIBERGLASS CORP ; PLASTONA JOHN WADDINGTON LTD ; OWENS CORNING FIBERGLAS TE TOLEDO OHIO CORP ; PLASTONA LTD ; PLATONA JOHN WADDINGTON LIMITE ; PLASTONA WADDINGTON LTD JOHN ; PLASTONA WADDINGTON J LTD ; PLATONA JOHN WADDINGTON LTD ; PURASUTONA JIYOON WADEINGUTON LTD ; PLASTONA LTDA

Assignee(s): PLASTONA PERCENT JOHN WADDINGTON LTD ; WILMINGTON TRUST CO ; WADE WILLIAM J ; OWENS CORNING FIBERGLAS CO ; PLASTONA JOHN WADDINGTON TE LEEDS GROOT LTD ; PLASTONA ; PLASTONA J WADDINGTON LTD ; PLASTONA JOHN WADDINGTON TE LEEDS GROOT BRITTANNIE LTD ; OWENS CORNING FIBERGLAS TE TOLEDO OHIO VER ST V AM CORP ; OWENS CORNING FIBERGLAS CORP ; OWENS CORNING FIBERGLAS TECHNOLOGY INC ; EISENBERG ARNOLD J ; GAUNT THOMAS N ; HARRISON PETER ; KLINK JEROME P ; OWENS CORNING FIBERGLAS ; OWENS CORNING FIBERGLAS A CORP OF DE CORP

Inventor(s):(std)**:** AJ EISENBERG ; ARNOLD JOSEPH EISENBERG ; EISENBERG A ; GAUNT T ; GAUNT T N ; HARRIAON P ; HARRISON P ; 1J P KLINK ; 2A J EISENBERG ; 3J E SANDERS ; JP KLINK ; KLING J P ; KLINK J ; PETER HARRISON ; PIITAA HAARISON ; SANDERS J E ; SANDERS JAMES ERVIN ; T N GAUNT ; THOMAS NORMAN GAUNT ; TN GAUNT ; TOOMASU NOOMAN GAUNTO ; SANDERS JAMES E ; P HARRISON ; KLINK JEROME P ; HARRISON PETER ; GAUNT THOMAS NORMAN ; GAUNT THOMAS N ; EISENBERG ARNOLD J ; AANORUDO JIYOSEFU AISENBERUGU ; JEROME PAUL KLINK ; KLINK JEROME PAUL ; KLINK J P ; JIEROOMU POORU KURINKU ; EISENBERG ARNOLD JOSEPH ; EISENBERG A J

Inventor(s):	A J EISENBERG ; J P KLINK ; PAUL KLINK JEROME ; JOSEPH EISENBERG ARNOLD ; 3 J E SANDERS ; 2 A J EISENBERG ; 1 J P KLINK ; KLINK J P AND EISENBERG A J ; NORMAN GAUNT THOMAS ; J E SANDERS
Agent(s):	CA
International class (IPC 8–9):	A63F1/02 B29C43/00 B29C43/22 B29C43/24 B29C47/00 B29C47/10 B29C61/00 B29D7/00 B29D7/01 B31B1/20 B31B1/60 B31B17/00 B31B3/00 B65D1/00 B65D5/00 B65D6/00 B65D65/38 B65H54/34 B65H54/86 B65H65/00 B65H67/04 B65H67/048 C08J3/20 C08J5/18 C08J9/00 C08K3/24 C08K3/26 C08K3/34 C08K3/36 C08L23/00 C08L23/06 C08L23/10 C08L23/12 C08L69/00 D01D11/04 D01D7/00 (Advanced/Invention); D01D7/00 (Advanced/Non–invention); A63F1/00 B29C43/00 B29C43/22 B29C43/24 B29C47/00 B29C47/10 B29C61/00 B29D7/00 B31B1/14 B31B1/60 B31B17/00 B31B3/00 B65D1/00 B65D5/00 B65D6/00 B65D65/38 B65H54/00 B65H65/00 B65H67/04 C08J3/20 C08J5/18 C08J9/00 C08K3/00 C08L23/00 C08L69/00 D01D11/00 D01D7/00 (Core/Invention); B29D C08F C08J C08K (Subclass/Invention)
International class (IPC 1–7):	B29D7/00 B29D7/02 B29D7/22 B29F3/01 B29F5/00 B31B1/00 B32B27/32 B65D3/10 B65D5/00 B65D5/08 B65D5/12 B65D5/50 B65D5/66 B65D6/00 B65D65/38 B65D85/36 B65H54/00 B65H54/02 B65H54/28 B65H54/34 B65H54/36 B65H54/86 B65H65/00 B65H67/04 B65H75/00 B65H75/10 B65H75/28 C03B37/00 C03B37/10 C08F C08J5/18 C08J9/04 C08K3/24 C08K3/26 C08K3/34 C08K3/36 C08L23/00 C08L23/02 C08L23/04 C08L23/06 C08L23/10 D01D11/04 D01D5/08 D01D7/00
CPC:	B65H65/00 B65H67/048 B65H2701/3122 B65H54/34 B65H54/86 B65H2701/31 B65H67/04 Y10S242/92 Y10S273/12 C08J9/0066 A63F1/02 B29C47/1063 B29K2105/0005 C08J2323/02 C08J3/201 B29C43/24 B65D65/38 B29C47/1081 B29C47/1009 B29C47/1027 B29C47/0021 B29K2105/12 B65D2301/20 B29C47/36 B29K2105/06 B29K2105/16 B29C47/0004 B65D5/00 Y10T428/1331 Y10T428/1372 Y10T428/25 Y10T428/256 Y10T428/258 Y10T428/259 Y10T428/268 Y10T428/31938 C08K3/0033
European class:	A63F1/02 B29C43/24 B29C47/00B B29C47/10 B29C47/10L B29C47/36 B65D5/00 B65D65/38 B65H54/34 B65H54/86 B65H65/00 B65H67/04 B65H67/048 C08J3/20E C08J9/00M L29K105/00E L29K105/06 L29K105/12 L65D301/20 L65H701/31 L65H701/3122 L65H730/122 M08J323/02
US class:	229/100 229/149 229/151 229/165 229/16R 242/18G 242/472.8 242/474.5 242/476.1 242/920 264/148 264/153 264/68 273/295 273/DIG.12 428/220 428/323 428/328 428/330 428/331 428/338 428/35 428/35.1 428/36.4 428/523 524/584
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Cited documents:	US3993718 A, US3924817 A, US3876735 A, US3874880 A, US3856222 A, US3801038 A, US3539317 A, US3428266 A, US3408012 A, US3298621 A, US3250731 A, US3198445 A, US3090570 A, US2998202 A, US2481031 A, JPS497055, JPS4955742, JPS4743181, JPS4641463 B1, JP7055, JP55742, JP50002945 U1, JP50002945, JP49055742 A2, JP49007055 A2, JP48001323 A2, JP47043181 A2, JP46041463 B4, JP46041463 B1, JP43181, JP41463, JP38015973 A2, GB1192132 A, FR2291138 A1, FR2168645 A5, DE2400215 A1, DE2231718 A1, DE2126945 A1, DE2112030 A1, DE1928891 A1, DE1247641 B, CA682421 A,
Forward Citations:	WO9533606, WO8100247, WO09024999, WO08124906, WO04067426, WO0164569, WO0164569, US9051152, US8292211, US8219227, US8212676, US8152090, US8128017, US7992414, US7731878, US7517422, US7482053, US7240875, US7208209, US6239196, US6119973, US6045083, US5788301, US5720913, US5679381, US5603464, US5580409, US5566904, US5509884, US5495990, US5366578, US5267848, US5223194, US5204179, US5158816, US5153039, US5143764, US5049441, US4911985, US4877814, US4795603, US4619415, US4618104, US4611382, US4578296, US4515269, US4418876, US4413791, US4398676, US4313576, US4307849, US4300728, US4205800, US4138069, US4101086, US4099679, US2014274643, US2013248639, US2011198432, US2011017833, US2010119799, US2010043354, US2008289367, US2008245921, US2007235580, US2007138700, US2006269710, US2006214046, US2006073327, US2006073318, US2005107231, US2005104245, US2005102897, US2005092742, US2005077421, US2004226953, US2004185200, JP63095246, JP60087927, JP60087926, JP60071425, JP59014935, JP2138826, GB2383291, GB2383291, GB2228253, GB2228253, GB2221446, GB2221446, FR2850093, FR2635758, FR2438005, FR2354954, FR2354954, EP1599405, EP1449868, EP0877044, EP0591824, EP0591824, EP0582234, EP0582234, EP0365400, EP0353991, EP0353496, EP0214858, EP0201060, EP0129890, EP0025340, EP0005664, DE3328260, DE3328260, DE2812356, AU614653,

Abstract:
Source: US4046329A The present invention embraces a method and apparatus for collecting linear material on wound packages including the steps of supplying linear material, rotating a first collet having a package collection region and a temporary package collection region, winding the linear material on the collection region of the first collet, rotating a second collet having a package collection region and a temporary collection region the second collet including a fixed member for engaging linear material during transfer of such material from the first to the second collet, laterally moving the advancing material along the first collet from the package collection region to the temporary collection region, contacting the linear material advancing to the first collet with the second rotating collet in the temporary collection region to engage the linear material on the member to move the linear material with it and thereby to begin collection of the material in the temporary collection region of the second collet to sever the material between the collets and laterally moving the material along the second collet from the temporary collection region to the collection region to begin package formation.

0) US2006145863A – RFID TAG WITH VISUAL ENVIRONMENTAL CONDITION MO...

56) Family number: 33095640 (US2006145863A) © PatBase

Title: RFID TAG WITH VISUAL ENVIRONMENTAL CONDITION MONITOR

Priority: EP20050854622 20051216 US20040017534 20041220 WO2005US45945 20051216

Family:

Publication number	Publication date	Application number	Application date
DE602005041869 D1	20140102	DE200560041869T	20051216
EP1829003 A2	20070905	EP20050854622	20051216
EP1829003 A4	20120627	EP20050854622	20051216
EP1829003 B1	20131113	EP20050854622	20051216
US2006145863 AA	20060706	US20040017534	20041220
US7209042 BB	20070424	US20040017534	20041220
WO06068999 A2	20060629	WO2005US45945	20051216
WO06068999 A3	20070222	WO2005US45945	20051216

Probable Assignee: TEMPTIME CORP

Assignee(s):(std)**:** GRABINER FREDERICK R ; MARTIN JEAN PAUL ; TEMPTIME CORP

Assignee(s): TEMPTIME CORP MORRIS PLAINS ; ARES CAPITAL COLLATERAL AGENT AS CORP

Inventor(s):(std)**:** GRABINER FREDERICK R ; MARTIN JEAN PAUL

Inventor(s): MARTIN JEAN PAUL MORRIS PLAINS ; GRABINER FREDERICK R MORRIS PLAINS ; GRABINER FREDERICK

Agent(s): MUELLER BORE AND PARTNER PATENTANWAELTE PARTG MBB; FRANZOLIN LUIGI; ROGER PITT, KIRKPATRICK AND LOCKHART NICHOLSON GRAHAM LLP; ROGER PITT KIRKPATRICK AND LOCKHART NICHOLSON GRAHAM LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): G03B11/00 G08B1/08 G08B13/14 G08B3/00 (Advanced/Invention); G03B11/00 G08B1/00 G08B13/14 G08B3/00 (Core/Invention)

CPC: B65D79/02 B65D2203/10 G01K3/04 G06K19/0717 G06K19/0723

European class: B65D79/02 G01K3/04 G06K19/07E2 G06K19/07T L65D203/10

US class: 250/482.1 250/482.100S 340/539.29 340/539.290S 340/572.1 340/572.8 340/572.800P 340/691.6

Classification Explorer

Cited documents: WO06048412 A1, WO04077002 A1, US6667092 BA, US6642016 BA, US6577238 BA, US6544925 BA, US6346886 BA, US6294999 BA, US6294997 BA, US6271753 BA, US625563 A, US6042264 A, US5936523 A, US5709472 A, US5057434 A, US4917503 A, US4892677 A, US4812053 A, US4789637 A, US4788151 A, US4737463 A, US4735745 A, US4646066 A, US4384980 A, US4189399 A, US2004212507 AA,

Forward Citations: WO16127093, WO16113596, WO15187875, WO14153348, WO13188356, WO13130755, WO13058991, WO11072296, WO11072296, WO10114752, WO08074917, WO08021991, WO07056752, US9652709, US9652708, US9652707, US9632485, US9606512, US9588053, US9563832, US9546911, US9518899, US9511918, US9474042, US9448182, US9395699, US9336421, US9305252, US9298167, US9224120, US9188962, US9165232, US9164493, US9159012, US9156167, US9063521, US9053616, US9031689, US9030295, US9016526, US9005980, US9004355, US9000925, US8985468, US8933789, US8932543, US8854189, US8820639, US8757503, US8752732, US8747775, US8671871, US8625132, US8622292, US8580568, US8564435, US8529682, US8514058, US8459509, US8421626, US8389910, US8343437, US8333518, US8330579, US8294589, US8264366, US8224518, US8220718, US8172468, US8068012, US7965186, US7891310, US7868767, US7767152, US7675409, US7624698, US7571695, US7490575,

US7481178, US7463147, US7386289, US2015022313, US2013339090, US2013107676, US2012044055, US2010277335, US2010259405, US2010245057, US2010188693, US2010171598, US2010070179, US2010065646, US2010057503, US2010051707, US2010044332, US2010039319, US2010039262, US2009206995, US2009201158, US2009055232, US2009051532, US2009009290, US2008288125, US2008257251, US2008220721, US2008121710, US2008111674, US2008110391, US2008100440, US2008034528, US2007272710, US2007203650, US2007125296, US2007083400, US2006273912, US2006172714, US2006171857, US2005284358, EP2894446, EP1980981, DE102013015673, DE102007049038,

Abstract:
Source: US2006145863A A combination RFID tag intended to be associated with a host product, for example by being secured to the outside of a package containing a perishable product, e.g. foodstuffs or vaccines, which RFID tag is provided with a visually readable environmental condition exposure indicator. The visual indicator can sense the exposure of the RFID tag to an environmental condition e.g. temperature, experienced by the host product providing a visual indication, e.g. a color change, readable externally of the RFID tag of the sensed environmental condition. The visual indicator can be chemically active, for example an acetylenic agent, and may be responsive to cumulative temperature excursions over time. The novel RFID tag 11 and tag inspection methods of the invention permit an efficacious harnessing of information about the condition exposure history of a specific inventory item including product identification and related data. The information from multiple items can be compiled into a database that may be audited or statistically analyzed to reveal useful information regarding the handling of the items.

0) US5661503A – POLYCRYSTALLINE SILICON–BASED SUBSTRATE FOR LIQ...

57) Family number: 9421107 (US5661503A) © PatBase

Title: Polycrystalline silicon–based substrate for liquid jet recording head, process for producing said substrate, liquid jet recording head in which said substrate is used, and liquid jet recording apparatus in which said substrate is used

Priority: JP19910290086 19911106 WO1992JP01434 19921106

Family:

Publication number	Publication date	Application number	Application date
DE69224897 D1	19980430	DE19926024897	19921106
DE69224897 T2	19980730	DE19926024897T	19921106
EP0570587 A1	19931124	EP19920923208	19921106
EP0570587 A4	19940706	EP19920923208	19921106
EP0570587 B1	19980325	EP19920923208	19921106
ES2114950 T3	19980616	ES19920923208T	19921106
JP2933429 B2	19990816	JP19910290086	19911106
JP5124191 A2	19930521	JP19910290086	19911106
US5661503 A	19970826	US19930078267	19931025
WO9308989 A1	19930513	WO1992JP01434	19921106

Probable Assignee: CANON KK

Assignee(s):(std)**:** CANON KK

Assignee(s): KYANON KK ; CANON INC ; CANON K K ; CANON K K TOKIO TOKYO JP ; CANON KABUSHIKI KAISHA

Inventor(s):(std)**:** TERAI HARUHIKO ; TERAI HARUHIKO C O CANON KABUS

Inventor(s): TERAI HARUHIKO C O CANON KABUSHIKI KAISH TOKYO 146 ; TERAI HARUHIKO C O CANON KABUSHIKI KAISH TOKYO...

Designated states: AT BE CH DE DK ES FR GB GR IE IT LU MC NL SE US

International class (IPC 8–9)**:** B41J2/05 B41J2/16 (Advanced/Invention); B41J2/05 B41J2/16 (Core/Invention)

International class (IPC 1–7)**:** B41J2/05 B41J2/16 G01D15/18

CPC: B41J2/1646 B41J2/1604 B41J2/1628 B41J2/1631 B41J2/1632 B41J2/1637 B41J2/1642 B41J2202/03

European class: B41J2/16B4 B41J2/16M3D B41J2/16M4 B41J2/16M5 B41J2/16M7 B41J2/16M8C B41J2/16M8T L41J202/03

US class: 347/63 438/21 438/762

Classification Explorer

Cited documents: US5469200 A, US5103246 A, US4551907 A, US4535343 A, US4432035 A, US4336548 A, JP59224358 A2, JP59022435 A2, JP3227634 A2, JP3022763 A2, JP1120867 A2, JP1012086 A2,

Forward Citations: US8960657, US8440522, US8287645, US7922814, US7456074, US7351639, US6730984, US6505914, US6140231, US2011165032, US2009119914, US2009011526, US2008314754, US2008233330, US2008188165, US2008102543, US2007267286, US2007123011, US2004140529,

Abstract:
Source: US5661503A PCT No. PCT/JP92/01434 Sec. 371 Date Oct. 25, 1993 Sec. 102(e) Date Oct. 25, 1993 PCT Filed Nov. 6, 1992 PCT Pub. No. WO93/08989 PCT Pub. Date May 13, 1993A substrate for liquid jet recording head including an electrothermal converting body comprising a heat generating resistor capable of generating thermal energy and a pair of wirings electrically connected to said heat generating resistor, characterized in that said substrate includes a base member constituted by a polycrystalline material such as a polycrystalline silicon material or the like, a process for producing this substrate, a liquid jet recording head in which said substrate, and a liquid jet recording apparatus in which said recording head is used. A desirable recording head which is free of a warpage or a curved portion and which provides a high quality recorded image

can be produced by using said base member. Further, a desirable recording apparatus which enables to record a high quality image at a high recording speed. In the process of producing said substrate, the surface of the polycrystalline base member is thermally oxidized to provide a surface excelling in flatness.

0) US5649620A – BASKET CARRIER WITH SQUARING TABS

58) Family number: 20464727 (US5649620A) © PatBase

Title: Basket carrier with squaring tabs

Priority: CO19960960650 19961211 US19950570459 19951211 WO1996US15799 19961002

Family:

Publication number	Publication date	Application number	Application date
AU199673860 A1	19970703	AU19960073860	19961002
AU717347 B2	20000323	AU19960073860	19961002
BRPI9606695 A	19990202	BR1996PI06695	19961002
CA2209728 AA	19970707	CA19962209728	19961002
CA2209728 C	20051206	CA19962209728	19961002
CO4480777 A1	19970709	CO19960065031	19961211
DE69627637 D1	20030528	DE19966027637	19961002
DE69627637 T2	20031016	DE19966027637T	19961002
EP0807074 A1	19971119	EP19960936135	19961002
EP0807074 A4	20000614	EP19960936135	19961002
EP0807074 B1	20030423	EP19960936135	19961002
ES2193267 T3	20031101	ES19960936135T	19961002
IL119793 A0	19970318	IL19960119793	19961210
JP2001508011 T2	20010619	JP19970522017T	19961002
JP3887419 B2	20070228	JP19970522017	19961002
MX9606153 A1	19970830	MX19960006153	19961205
NZ320990 A	19990429	NZ19960320990	19961002
US5649620 A	19970722	US19950570459	19951211
WO9721610 A1	19970619	WO1996US15799	19961002
ZA9610378 A	19970623	ZA19960010378	19961210

Probable Assignee: RIVERWOOD INT USA INC

Assignee(s):(std)**:** RIVERWOOD INT CORP

Assignee(s): GRAPHIC PACKAGING INT INC ; JPMORGAN CHASE BANK ADMINISTRATIVE AGENT AS ; RIVERWOOD INT USA INC ; HARRELSON GLEN R ; BANK OF AMERICA NA ; BANK OF AMERICA NA ADMINISTRATIVE AGENT AS ; CHASE MANHATTAN BANK ADMINISTRATIVE AGENT AS ; CHEMICAL BANK ADMINISTRATIVE AGENT AS ; GRAPHIC PACKAGING INT ; RIVERWOOD INT ; RIVERWOOD INT CORP ATLANTA

Inventor(s):(std)**:** GLEN HARRELSON ; HARRELSON GLEN ; HARRELSON GLEN R

Agent(s): PHILLIPS ORMONDE FITZPATRICK; MACRAE AND CO; MARGARITA CASTELLANOS ABONDANO

Designated states: AT AU BE BR CA CH DE DK ES FI FR GB GR IE IT JP KR LU MC NL NO NZ PT SE

International class (IPC 8–9): B65D71/00 B65D71/28 B65D71/58 (Advanced/Invention); B65D71/00 B65D71/06 (Core/Invention)

International class (IPC 1–7): B65D B65D01/00 B65D71/00 B65D71/28 B65D71/58 B65D75/00

CPC: B65D71/0022 B65D2571/00141 B65D2571/00388 B65D2571/00487 B65D2571/00524 B65D2571/0066 B65D2571/00802 B65D2571/00845 B65D2571/00969

European class: B65D71/00B3 L65D571/00Y1A1 L65D571/00Y3B1B L65D571/00Y4B3B L65D571/00Y4R1 L65D571/00Y6A1 L65D571/00Y7E L65D571/00Y9B L65D571/00Y9N1C

US class: 206/171 206/172 206/173 206/188

Classification Explorer

Cited documents:

US5547074 A, US5499712 A, US4029205 A, US3917060 A, US3757991 A, US3572545 A, US3456841 A, US3349957 A, US3278076 A, US3190487 A, US2776072 A, GB1147566 A,

Forward Citations: WO16040159, US9415914, US9061810, US9061809, US8869979, US8622207, US8511463, US8490785, US8297437, US8087512, US8020695, US7677387, US2011198347, US2011083976, US2010147932, US2010072086, US2007295623, DE102010050223,

Abstract:
Source: US5649620A A basket−style carrier designed to be automatically squared during fabrication. Squaring tabs at the lower ends of riser panels extend into slots in the end edges of the outer bottom panel flap to align the bottom panel flaps. The tabs are then folded over and glued to the outer face of the outer bottom panel flaps to strengthen the bottom panel.

0) WO14140394A8 – METHOD AND MACHINES FOR TRANSFORMING PACKAGING ...

59) Family number: 57409440 (WO14140394A8) © PatBase

Title: METHOD AND MACHINES FOR TRANSFORMING PACKAGING

Priority: ES20130000271 20130308

Family:

Publication number	Publication date	Application number	Application date
WO14140394 A1	20140918	WO2014ES00041	20140311
WO14140394 A8	20150115	WO2014ES00041	20140311

Probable Assignee: LOPEZ AROSTEGUI SAENZ GUILLERMO

Assignee(s):(std)**:** LOPEZ AROSTEGUI SAENZ GUILLERMO

Inventor(s):(std)**:** LOPEZ AROSTEGUI SAENZ GUILLERMO

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65B3/02 B65D5/00 B65D77/06 (Advanced/Invention)

CPC: B65D33/1675 B65D77/06 B65B3/02 B65B51/146 B65B61/24 B65D75/50 B65D77/12

Classification Explorer

Cited documents: US4750313 A, US4094127 A, US2011073605 AA, EP2308758 A1,

DE102005015565 A1

Forward Citations: CN104787395,

Abstract:
The invention concerns a method and machine for transforming sealed packaging made from flexible material into cubes, the initial packaging being gripped and blocked by a set of securing clamps in the transverse region of both faces. One of the lateral faces of the packaging is then struck by an impact clamp, the two flaps are sealed by sealing and cutting clamps, and the packaging is rotated through 180 degrees in order to be subsequently secured. Two closure systems then slow down and meter the liquid fluids of the packaging by means of multiple labyrinth welding lines which seal the two faces such that a set of two small parallel gripping plates grasp the flap and one thereof adheres to one of the faces of the flap.

0) US2013034537A – SIMULTANEOUS CO–TREATMENT OF PHYSICAL AND MENTA...

60) Family number: 51297289 (US2013034537A) © PatBase

Title: SIMULTANEOUS CO–TREATMENT OF PHYSICAL AND MENTAL SYMPTOMS RELATED TO SEVERE MENTAL DISORDERS BY A SPECIALLY FERMENTED SOY FORMULATION (FSWW08)

Priority: US20100421088P 20101208 US20110315258 20111208 US20110503787P 20110701

Family:

Publication number	Publication date	Application number	Application date
US2013034537 AA	20130207	US20110315258	20111208
WO12078932 A2	20120614	WO2011US64041	20111208
WO12078932 A9	20170126	WO2011US64041	20111208

Probable Assignee: GOCAN ANCA GABRIELA

Assignee(s):(std)**:** GOCAN ANCA GABRIELA ; ROHR UWE ; WAINRIGHT WALTER

Inventor(s):(std)**:** GOCAN ANCA GABRIELA ; ROHR UWE ; WAINRIGHT WALTER

Agent(s): NEHRBASS SETH M ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9)**:** A23L1/30 A61K31/352 A61K36/185 A61K36/48 A61P1/00 A61P1/04 A61P25/00 A61P25/18 A61P25/22 A61P3/00 A61P31/12 (Advanced/Invention)

CPC: A61K31/352 A61K36/48 A61K45/06 A61K2236/19

European class: A61K31/352 A61K36/48 A61K45/06 K61K236/19

US class: 424/115 514/456

Classification Explorer

Abstract:
Source: US2013034537A A method of treating severe mental diseases and related disorders or conditions includes administering to a patient in need thereof an effective amount of a composition including isoflavones and Bowman Birk Inhibitory Factor (BBIF). Preferably, the composition is a fermented soy composition. Preferably, one first diagnoses a patient with a particular mental disease or disorder, and then prescribes the composition as a treatment for the particular mental disease or disorder. A patient is preferably given daily a dosage of 3–10 mg of isoflavones and 5–10 CI (chymotrypsin inhibitor) of BBIF per kg of body weight, more preferably a dosage of 5–9 mg of isoflavones and 5–10 CCI of BBIF per kg of body weight, and most preferably a dosage of 5–10 mg of isoflavones and 5–10 CCI of BBIF per kg of body weight. Treatment preferably lasts 7 days–14 days, or until all symptoms disappear.

61) Family number: 33028516 (US2008142421A) © PatBase

Title: BOTTOM FILLABLE BOTTLES AND SYSTEMS FOR CHARGING THE SAME

Priority:

CA20052588827	20051121	CA20052819479	20051121	US20040630011P	20041121
US20050685605P	20050527	US20050729067P	20051020	CA20132588827	20130717
US20050791237	20051121	US20050791244	20051121	US20050791238	20051121
US20050791247	20051121	US20070791238	20071128	US20070791244	20071018
US20070791237	20071018	US20070934229P	20070612	WO2005US42042	20051121
WO2005US42041	20051121	WO2005US42043	20051121	WO2005US42051	20051121
US20080791247	20080305	US20080137240	20080611	US20100732500	20100326
US20120349160	20120112	US20140481128	20140909		

Family:

Publication number	Publication date	Application number	Application date
CA2588827 AA	20070522	CA20052588827	20051121
CA2588827 C	20150623	CA20052588827	20051121
CA2819479 AA	20060526	CA20052819479	20051121
CN101357697 A	20090204	CN200810111196	20080612
CN101357697 B	20110907	CN200810111196	20080612
CN102351061 A	20120215	CN201110192569	20080612
CN102351061 B	20131225	CN201110192569	20080612
EP1824735 A1	20070829	EP20050823992	20051121
EP1824735 A4	20110803	EP20050823992	20051121
EP1824736 A1	20070829	EP20050824919	20051121
EP1824736 A4	20110803	EP20050824919	20051121
EP1824737 A1	20070829	EP20050825097	20051121
EP1824737 A4	20110803	EP20050825097	20051121
EP1838410 A1	20071003	EP20050824998	20051121
EP1838410 A4	20110803	EP20050824998	20051121
HK1126735 A1	20120713	HK20090105919	20090702
HK1161579 A1	20140704	HK20120102146	20090702
HK1161579 A3	20120727	HK20090102146	20090702
US2008142421 AA	20080619	US20050791237	20051121
US2008169048 AA	20080717	US20050791244	20051121
US2008185071 AA	20080807	US20050791238	20051121
US2008277020 AA	20081113	US20050791247	20051121
US2008302711 AA	20081211	US20080137240	20080611
US2010237033 AA	20100923	US20100732500	20100326
US2012211461 AA	20120823	US20120349160	20120112
US2014373973 AA	20141225	US20140481128	20140909
US7708035 BB	20100504	US20080137240	20080611
US7766057 BB	20100803	US20050791247	20051121
US7824545 BB	20101102	US20050791237	20051121
US8082956 BB	20111227	US20050791244	20051121
US8113247 BB	20120214	US20050791238	20051121
US8215344 BB	20120710	US20100732500	20100326
US8827106 BB	20140909	US20120349160	20120112
US9327882 BB	20160503	US20140481128	20140909
WO06055866 A1	20060526	WO2005US42041	20051121
WO06055867 A1	20060526	WO2005US42042	20051121
WO06055868 A1	20060526	WO2005US42043	20051121

WO06055870 A1	20060526	WO2005US42051	20051121

Probable Assignee: WINDMILLER DAVID

Assignee(s):(std)**:** DAVID MITCHELL WINDMILLER ; DAVID WINDMILLER MITCHELL ; MITCHELL DAVID WINDMILLER ; WINDMILLER DAVID ; WINDMILLER DAVID MITCHELL

Assignee(s): WINDMILLER DAVID MITCHELL18 GWYNNE ROADMELVILLENY11747US ; WINDMILLER MITCHELL DAVID

Inventor(s):(std)**:** DAVID WINDMILLER MITCHELL ; MITCHELL DAVID WINDMILLER ; WINDMILLER DAVID MITCHELL

Inventor(s): WINDMILLER DAVID MITCHELL18 GWYNNE ROADMELVILLENY11747US ; WINDMILLER MITCHELL DAVID

Agent(s): OGILVY RENAULT LLP SENCRL SRL; BERESKIN AND PARR LLP SENCRL SRL; BORDEN LADNER GERVAIS LLP; CARTER DELUCA FARRELL AND SCHMIDT; CARTER DELUCA FARRELL AND SCHMIDT LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A45F3/16 A47G19/22 B01D17/12 B01D21/30 B01D35/14 B65B1/04 B65B3/00 B65B3/04 B65D1/06 B65D23/00 B65D25/00 B65D25/40 B65D43/00 B65D47/00 B65D47/06 B65D47/24 B65D51/00 B67C3/02 B67C3/26 B67C3/28 B67C3/34 B67D1/00 B67D1/08 B67D1/12 F16K15/00 (Advanced/Invention);
A45F3/00 B01D21/30 B01D35/14 B65B1/04 B65B3/04 B65D1/06 B65D25/00 B65D25/38 B65D43/00 B65D47/00 B65D47/06 F16K15/00 (Core/Invention);
A45F B65D B67C F16K (Subclass/Invention)

CPC: B65D47/065 B67D1/0081 B67D1/0805 B65D47/24 B67C3/2637 A47G19/2266 B65D1/06 B65D47/248 C02F2307/02

European class: B65D1/06 B65D47/06B B65D47/24E B67D1/00H8 B67D1/08A6 M02F307/02

US class: 1/1 141/113 141/18 141/2 141/20 141/236 141/237 141/244 141/301 141/325 141/350 141/350S 141/356 210/110 210/137 210/143 210/149 210/181 210/184 210/232 210/257.1 210/266 210/314 210/323.1 210/335 210/94 215/2 215/200 215/200S 215/229 215/235 215/2P 215/387 215/388 215/389 220/202 220/254.3 220/254.300S 220/708 220/708S 220/709 220/715 220/756 220/756S 220/86.1 220/86.100S 222/146.1 222/189.06 222/189.08 222/25 222/490 222/490S 222/52 222/528 222/529 222/532 222/536 222/544 222/545

Classification Explorer

Cited documents: WO05058745 A2, USRE32142 E, USH2027 H1, USD591160 S1, USD588856 S1, USD511836 S1, USD486739 S1, USD481951 S1, USD433337 S1, USD413067 S1, USD376430 S1, USD216541 S1, USD214147 S1, US8602238 BB, US8550269 BB, US8215344 BB, US7766057 BB, US7708035 BB, US7516862 BB, US7377296 BB, US7255241 BB, US7124907 BB, US7093735 BB, US6929025 BB, US6919025 BB, US6779453 BB, US6779435 BA, US6729362 BB, US6684915 BA, US6607013 BA, US6607012 BB, US6589329 BA, US6569329 BA, US6530504 BB, US6523711 BA, US6508070 BA, US6494346 BB, US6491811 BB, US6491069 BB, US6468435 BA, US6427874 BB, US6427730 BB, US6405901 BA, US6390341 BA, US6371329 BA, US6367668 BA, US6344146 BA, US6293437 BA, US6230940 BA, US6206058 BA, US6165362 A, US6153096 A, US6120682 A, US6117319 A, US6095381 A, US6089418 A, US6089411 A, US6050433 A, US6004460 A, US6001244 A, US5971225 A, US5927566 A, US5919365 A, US5884793 A, US5839614 A, US5817231 A, US5743443 A, US5632892 A, US5623974 A, US5609759 A, US5582320 A, US5579948 A, US5573142 A, US5545315 A, US5535791 A, US5524682 A, US5524680 A, US5518142 A, US5484080 A, US5462099 A, US5439143 A, US5431290 A, US5411183 A, US5409144 A, US5388620 A, US5377877 A, US5361934 A, US5346081 A, US5343904 A, US5339995 A, US5339982 A, US5337918 A, US5312019 A, US5282541 A, US5265757 A, US5213236 A, US5203468 A, US5167819 A, US5150815 A, US5115950 A, US5092750 A, US5017284 A, US4966300 A, US4938387 A, US4877065 A, US4752389 A, US4729495 A, US4728006 A, US4709734 A, US4685598 A, US4481986 A, US4473097 A, US4197884 A, US4167884 A, US4162028 A, US4142651 A, US4133457 A, US3993218 A, US3940019 A, US3930598 A, US3904743 A, US3904079 A, US3748818 A, US3718165 A, US3654743 A, US3642037 A, US3593760 A, US3592244 A, US3563287 A, US3482731 A, US3451592 A, US3422837 A, US3325031 A, US2937795 A, US2064584 A, US2011062170 AA, US2011049169 AA, US2009145839

AA, US2009014583, US2008277020 AA, US2005145570 AA, US2005092760 AA, US2005029271 AA, US2005016622 AA, US2003085232 AA, US2002170874 AA, US2002134801 AA, GB2137181 A1, EP0947518 A1, EP0089064 A1, DE3814937 C1, DE2159498 A1, DE20115487 U1,

Forward Citations: WO14086915, WO14009339, WO11106259, WO11091047, WO09143164, USD765469, USD750428, USD748943, USD747924, USD740605, USD736562, USD732892, USD725436, USD724384, USD691420, USD685606, USD682034, USD671359, USD636634, USD617136, US9663264, US9440835, US9392892, US9365408, US9327882, US9314120, US9284174, US9212067, US9162802, US9150335, US9016333, US8997803, US8956334, US8919593, US8899281, US8827106, US8777182, US8763655, US8602238, US8313644, US8292109, US8215344, US8157435, US8113247, US2017144809, US2015320256, US2015108147, US2014373973, US2014182744, US2014137983, US2014018747, US2013319915, US2013276411, US2013213976, US2012305559, US2012255647, US2012211461, US2012103926, US2012012585, US2011121020, US2011062170, US2011061764, US2010237033, US2010232256, US2010024660, US2009266815, US2008223478, US2008185071, RU2504504, GB2475819, GB2475819, EP2957504, EP2285687, EP2285687, EP1991094, CN104244764, CN104136361, CN102871336, CN102803073, CN102099251, AU2011206946, AU2009249194,

Abstract:
Source: US2008142421A According to an aspect of the present disclosure, a fluid supply assembly fluidly connectable to a source of fluid is provided. The fluid supply assembly includes a housing (702); a hydraulic assembly (710) supported within the housing (702), wherein the hydraulic assembly (710) is configured and adapted to pressurize the fluid which is supplied to a solenoid shut−off valve (724); a tank assembly (714) supported within the housing (702) for retaining a quantity of pre−conditioned fluid therein; and a filter assembly (720) supported within the housing (702) and in fluid communication with the hydraulic assembly (710).

0) US2004226941A – SELF–VENTING MICROWAVE COOKING CONTAINER FOR US...

62) Family number: 31339710 (US2004226941A) © PatBase

Title: SELF–VENTING MICROWAVE COOKING CONTAINER FOR USE WITH A VERTICAL FILL AUTOMATED MACHINE

Priority: US20030462751P 20030414 US20030469155P 20030509 US20040825276 20040415 US20040556207 20040510 US20040825276 20040413 US20060410389 20060425 WO2004US14635 20040510

Family:

Publication number	Publication date	Application number	Application date
US2004226941 AA	20041118	US20040825276	20040413
US2005155965 A9	20050721	US20040825276	20040413
US2006186116 AA	20060824	US20060410389	20060425
US2007181570 AA	20070809	US20040556207	20040510
US7034268 BB	20060425	US20040825276	20040413
WO04100738 A2	20041125	WO2004US14635	20040510
WO04100738 A3	20061026	WO2004US14635	20040510

Probable Assignee: STEAMWAY FRANCHISE SALES INC

Assignee(s):(std)**:** HOPKINS GARY L SR ; HOPKINS GARY SR ; STEAMWAY FRANCHISE SALES INC

Assignee(s): HOPKINS GARY L ; STEAMWAY CORP ; HOPKINS GARY LSR

Inventor(s):(std)**:** HOPKINS GARY L ; HOPKINS GARY L SR ; HOPKINS GARY SR ; HOPKINS SR GARY L

Inventor(s): SR GARY L ; HOPKINS GARY LSR ; HOPKINS ; HOPKINS GARY

Agent(s): JOHN V MORIARTY WOODARD EMHARDT MORIARTY MCNETT AND HENRY LLP; DAVID W CARRITHERS CARRITHERS LAW OFFICE PLLC; DAVID W CARRITHERS, CARRITHERS LAW OFFICE; CARRTTHERS LAW OFFICE PLLC; DAVID W

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A23L3/01 B65D33/06 B65D51/16 B65D77/22 B65D81/34 H05B6/80 (Advanced/Invention); H05B6/68 (Advanced/Non–invention)

International class (IPC 1–7): A23L3/00 A47J

CPC: A23L3/01 B65D33/06 B65D77/225 B65D81/3453 B65D81/3461 B65D2205/00 B65D2581/3456

European class: A23L3/01 B65D33/06 B65D77/22D B65D81/34M1 B65D81/34M2 L65D205/00 L65D581/34M3M1

US class: 219/700 219/735 220/360

Classification Explorer

Cited documents: USD487971 S1, USD475571 S1, USD475022 S1, USD433592 S1, USD420584 S1, USD378178 S1, US7314294 BA, US6847022 BB, US6847022 BA, US6847022 B1, US6733807 BB, US6660983 BB, US6660983 BA, US6660983 B1, US6615985 BA, US6559431 BB, US6559431 BA, US6559431 B1, US6309684 BB, US6309684 BA, US6309684 B1, US6306448 BA, US6187354 BA, US6066346 A, US6054698 A, US5750967 A, US5746862 A, US5521361 A, US5098364 A, US2005068776 AA,

Forward Citations: WO14083269, WO08006799, WO08006799, WO07130635, WO07130635, US9191999, US8748786, US8468782, US8240546, US8153216, US8056209, US2013272629, US2011120993, US2011049154, US2010266732, US2010028661, US2009272744, US2009098257, US2009003735, US2008290100, US2008286512, US2008283484, US2008232721, US2008223007, US2008203141, US2008193059, US2008184548, US2008063320, US2008044525, US2007278221, US2007278116, US2007048421,

US2005276885, FR2998886, EP2011742, EP1775229, AU2006203608,

Abstract:
Source: US2004226941A A self−venting microwave cooking container for use with a vertical fill automated machine generally comprises a bag portion, a tray portion, and a venting configuration. The bag portion defines an opening for receiving a food product from a vertical fill automated machine, and the tray portion includes a floor having a surface for supporting the food product. Once the food has been delivered to the container, the opening is sealed, and the food product is maintained within the container and ready for subsequent cooking in a microwave oven.

0) US2009084817A – BAR GUN ASSEMBLY

63) Family number: 43088603 (US2009084817A) © PatBase

Title: BAR GUN ASSEMBLY

Priority: AU20090246920 20090514 AU20150201360 20150316 US20070997070P 20071001 US20080127769P 20080515 GB20100007390 20080930 EP20090746969 20090514 US20080286441 20080930 US20080315249 20081201 US20090465283 20090513 US20090205749P 20090122 US20110284101 20111028 US20110287483 20111102 US20130850799 20130326 US20080128719P 20080523 WO2008US11281 20080930 WO2009US02984 20090514

Family:

Publication number	Publication date	Application number	Application date
AU2009246920 AA	20091119	AU20090246920	20090514
AU2015201360 AA	20150416	AU20150201360	20150316
DE602009025344 D1	20140828	DE200960025344T	20090514
EP2300353 A1	20110330	EP20090746969	20090514
EP2300353 A4	20121010	EP20090746969	20090514
EP2300353 B1	20140716	EP20090746969	20090514
GB201007390 A0	20100616	GB20100007390	20080930
GB201019833 A0	20110105	GB20100019833	20090514
GB201107951 A0	20110622	GB20110007951	20080930
GB201107952 A0	20110622	GB20110007952	20080930
GB201107953 A0	20110622	GB20110007953	20080930
GB201119919 A0	20120104	GB20110019919	20080930
GB201210739 A0	20120801	GB20120010739	20120618
GB201210740 A0	20120801	GB20120010740	20120618
GB201210905 A0	20120801	GB20120010905	20090514
GB201210906 A0	20120801	GB20120010906	20090514
GB2468792 A1	20100922	GB20100007390	20080930
GB2468792 B2	20120201	GB20100007390	20080930
GB2476347 A1	20110622	GB20100019833	20090514
GB2476347 B2	20121121	GB20100019833	20090514
GB2480531 A1	20111123	GB20110007951	20080930
GB2480531 B2	20120530	GB20110007951	20080930
GB2480532 A1	20111123	GB20110007952	20080930
GB2480532 B2	20120530	GB20110007952	20080930
GB2480533 A1	20111123	GB20110007953	20080930
GB2480533 B2	20120530	GB20110007953	20080930
GB2482813 A1	20120215	GB20110019919	20080930
GB2482813 B2	20120328	GB20110019919	20080930
GB2490054 A1	20121017	GB20120010739	20120618
GB2490054 B2	20130327	GB20120010739	20120618
GB2490055 A1	20121017	GB20120010740	20120618
GB2490055 B2	20130327	GB20120010740	20120618
GB2490814 A1	20121114	GB20120010905	20090514
GB2490814 B2	20130522	GB20120010905	20090514
GB2490815 A1	20121114	GB20120010906	20090514
GB2490815 B2	20130529	GB20120010906	20090514
US2009084817 AA	20090402	US20080286441	20080930
US2009120960 AA	20090514	US20080315249	20081201
US2009283543 AA	20091119	US20090465283	20090513

US2012074169 AA	20120329	US20110284101	20111028	
US2012074170 AA	20120329	US20110287483	20111102	
US2013221025 AA	20130829	US20130850799	20130326	
US8109413 BB	20120207	US20080286441	20080930	
US8336736 BB	20121225	US20090465283	20090513	
US8387829 BB	20130305	US20110284101	20111028	
US8418888 BB	20130416	US20110287483	20111102	
US8479954 BB	20130709	US20080315249	20081201	
US8807395 BB	20140819	US20130850799	20130326	
WO09045379 A1	20090409	WO2008US11281	20080930	
WO09139882 A1	20091119	WO2009US02984	20090514	

Probable Assignee: SCHROEDER IND INC

Assignee(s):(std)**:** ABSALON DEBORAH ; D B A SCHROEDER AMERICA SCHROEDER IND INC ; SANTY DAVE ; SANTY DAVID ; SCHROEDER A A JUD ; SCHROEDER IND INC D B A SCHROEDER AMERICA ; SCHROEDER IND INC D B A SCHROE ; SCHROEDER IND INC D B A ; SCHROEDER IND LLC ; SCHROEDER IND INC ; SCHROEDER JUD A A

Assignee(s): SCHROEDER INDUSTRIES LLC ; SCHROEDER AA JUD ; SCHROEDER AA ; SCHROEDER IND INC SAN ANTONIO ; SCHROEDER INDUSTRIES INC ; SCHROEDER IND ; SCHROEDER INDUSTRIES INC D B A ; SCHROEDER INDUSTRIES INC D B A SCHROEDER AMERICA ; SCHROEDER A A

Inventor(s):(std)**:** ABSALON DEBORAH ; SANTY DAVE ; SANTY DAVID ; SCHROEDER A A JUD ; SCHROEDER JUD A A

Inventor(s): SCHROEDER AA ; SCHROEDER AA JUD ; SCHROEDER A A ; A A JUD SCHROEDER ; AA JUD SCHROEDER ; AAJUD SCHROEDER ; DAVE SANTY ; DAVID SANTY ; DEBORAH ABSALON ; JUD A A SCHROEDER

Agent(s): BALDWINS INTELLECTUAL PROPERTY; HARTLEY LUCINDA JANE; JACKSON WALKER LLP; CHAPMAN DANIEL D; SISSON THOMAS E

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B05B7/04 B67D1/00 B67D5/06 B67D7/06 B67D7/08 B67D7/42 B67D7/74 F16L39/00 (Advanced/Invention); B67D1/00 B67D7/06 B67D7/42 (Core/Invention)

CPC: B67D1/0044 B67D7/42 B05B7/04 B67D7/74 B64D1/0086 B67D1/0086 Y10T137/87885 B67D1/00 B67D1/0084 Y10T137/2496 F16L39/00 B67D2210/0006

European class: B67D1/00H2B B67D1/00H8B2B B67D1/00H8C2 F16L39/00 L67D210/00D4D

US class: 137/87.01 137/87.010S 137/884 222/129.1 222/144.5 222/144.500P 222/145.5 222/23

Classification Explorer

Cited documents: WO09090429, WO06088990, WO03024862, WO02090241, USD648826 S1, USD648617 S1, USD648421 S1, USD648420 S1, USD647785 S1, USD643708 S1, USD638659 S1, USD628014 S1, USD626375 S1, USD626374 S1, USD626373 S1, USD560965 S1, USD549021 S1, USD309232 S1, USD274031 S1, USD216861 S1, USD194343 S1, US8573254 BB, US8479954 BB, US8091737 BB, US7931382 BB, US7866509 BB, US7762431 BA, US7762421 BB, US7757498 BB, US7448418 BA, US7445133 BB, US7384073 BA, US7373784 BB, US7363962 BB, US7337627 BB, US7337618 BB, US7311226 BB, US7305847 BB, US7296428 BB, US7266974 BB, US7232044 BA, US7168593 BB, US7080937 BA, US7048148 BB, US7028864 BB, US7025230 BA, US7021077 BB, US6988641 BB, US6945070 BA, US6883685 BB, US6832487 BA, US6761036 BB, US6725687 BB, US6722527 BA, US6698229 BB, US6672849 BA, US6644508 BB, US6626005 BB, US6463753 BA, US6405897 BA, US6394311 BB, US6390662 BA, US635824 A, US6345729 BA, US6328181 BA, US6322051 BA, US6321938 BA, US6283155 BA, US6269973 BA, US6260477 BA, US6253963 BA, US6196422 BA, US6193114 BA, US6148681 A, US6112946 A, US6098842 A, US6047859 A, US6013701 A, US5909826 A, US5873259 A, US5725028 A, US5649431 A, US5637527 A, US5575405 A, US5566863 A, US5524452 A, US5505337 A,

US5415326 A, US5305924 A, US5190188 A, US5152429 A, US5042692 A, US5033648 A, US4986449 A, US4921140 A, US4821921 A, US4781309 A, US4711374 A, US4637527 A, US4635824 A, US4631375 A, US4619378 A, US4519635 A, US4497421 A, US4469389 A, US4433795 A, US4390224 A, US4219046 A, US4196886 A, US4162028 A, US4098295 A, US3963317 A, US3867962 A, US3863810 A, US3800826 A, US3703187 A, US3664550 A, US3643754 A, US3619668 A, US3326520 A, US3241720 A, US3168967 A, US3108779 A, US3013701 A, US3009653 A, US2937792 A, US2887250 A, US2682386 A, US2478586 A, US2011315711 AA, US2011286883 AA, US2011073617 AA, US2011057134 AA, US2010314411 AA, US2010147886 AA, US2010116842 AA, US2010097881 AA, US2009230148 AA, US2009145927 AA, US2009090747 AA, US2009078722 AA, US2008217357 AA, US2008135426 AA, US2006162370 AA, US2005160639 AA, US2003071060 AA, US2001030308 AA, US1947329 A, US1627147 A, GB2042354 A1, GB1300072 A,

Forward Citations: WO16100935, USD786616, USD717593, USD717592, USD717591, USD717590, USD697753, USD674421, USD666869, US9657853, US9656849, US9624087, US9610551, US9309103, US9284176, US9085451, US9010579, US8814003, US8807395, US8459505, US8075022, US2016159631, US2016076661, US2016060090, US2014361041, US2014238247, US2014034675, US2013221025, US2013119089, US2011073617, US2011042415, US2010314411, US2009189390, JP5758895, JP2013503091, ITRM20120007, AU2010286482,

Abstract:
Source: US2009084817A A bar gun assembly for receiving a multiplicity of fluid carrying tubes carrying a multiplicity of fluids, for example, flavored syrup and soda water, therein. The bar gun assembly has a handle having a handle body. The handle body is a multiplicity of ports and fluid channels therein. A supply line connector assembly engages the supply lines and the handle body. A backing plate assembly engages openings in the fluid chambers of the handle body to seal fluid therein. A nozzle assembly engages at least some of the fluid channels in the handle.

0) US6315195B – TRANSACTION APPARATUS AND METHOD

64) Family number: 46650817 (US6315195B) © PatBase

Title: TRANSACTION APPARATUS AND METHOD

Priority: US19980076051 19980511 US19980082299P 19980417 WO1999US05839 19990317

Family:

Publication number	Publication date	Application number	Application date
AR019061 AA	20011226	AR1999P101711	19990414
BRPI9909402 A	20001219	BR1999PI09402	19990317
BRPI9909402 B1	20121127	BR1999PI09402	19990317
CA2305310 AA	20000407	CA19992305310	19990317
CA2305310 C	20030805	CA19992305310	19990317
CN1293787 A	20010502	CN19998004149	19990317
CN1293787 B	20100609	CN19998004149	19990317
CO4890896 A1	20000228	CO19990022944	19990416
EP1072012 A1	20010131	EP19990909982	19990317
EP1072012 A4	20051123	EP19990909982	19990317
EP1072012 B1	20141008	EP19990909982	19990317
PL196157 B1	20071231	PL19990339911	19990317
PL339911 A1	20010115	PL19990339911	19990317
US6315195 BA	20011113	US19980076051	19980511
WO9954841 A1	19991028	WO1999US05839	19990317

Probable Assignee: DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD INC

Assignee(s):(std): DIEBOLD INC

Assignee(s): DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD I ; DIEBOLD SELF SERVICE SYSTEMS DIVISION OF DIEBOLD INC ; JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; RAMACHANDRAN NATARAJAN

Inventor(s):(std): BARTHOLOMEW J FRAZZITTA ; DEPIETRO MARK ; KALMAN JEFFREY M ; MCINTYRE DANIEL S ; RAMACHANDRAN NATARAJAN ; RANDOLPH C BENORE

Inventor(s): NATARAJAN RAMACHANDRAN ; MARK DEPIETRO ; FRAZZITTA BARTHOLOMEW J ; JEFFREY M KALMAN ; BENORE RANDOLPH C ; DANIEL S MCINTYRE

Agent(s): DIMOCK STRATTON LLP; CARLOS REINALDO OLARTE GARCIA; MELDRUM DAVID JAMES

Designated states: AT BE BR CA CH CN CY DE DK ES FI FR GB GR IE IN IT LU MC MX NL PL PT RU SE ZA

International class (IPC 8–9): G06K19/08 G06K19/67 G06K5/00 G06K7/00 G06Q20/20 G06Q20/32 G06Q20/34 G07F7/10 (Advanced/Invention)

International class (IPC 1–7): G06K19/00 G06K19/67 G06K5/00 G06K7/00 G06K7/05 G07F7/10

CPC: G07F7/1008 G06K7/0004 G06K19/08 G06Q20/20 G06Q20/32 G06Q20/3226 G06Q20/341 G07F7/0886

European class: G06K19/08 G06K7/00C G06Q20/20 G06Q20/32 G06Q20/3226 G06Q20/341 G07F7/08G2P G07F7/10D

US class: 235/380 235/487

Classification Explorer

Cited documents: WO9417498 A1, WO8203286 A1, US5770849 A, US5748737 A, US5623552 A, US5587560 A, US5585787 A, US5221838 A, US4985920 A, US4968873 A, US4960982 A, US4837422 A, US4791283 A, US4697073 A, US4684791 A, US4614861 A, US4454414 A, US4341951 A, US4256955 A, JP64064088 A2, JP5081489 A2, JP4303281 A2, JP2005195 A2, JP1229390 A2, JP1224888 A2, FR2696888 A1,

Forward Citations:

WO16096412, WO08148059, WO07142819, WO07142819, WO04031969, WO04031969, WO03094367, WO03094367, WO03063073, WO03050749, WO0213134, WO0213134, WO0143404, WO0135353, USRE45615, USRE45416, USRE43460, USRE43157, USD643062, USD636021, USD636020, USD635186, USD602986, USD602522, US9626611, US9607475, US9558484, US9489949, US9489608, US9483722, US9454752, US9390359, US9378206, US9361444, US9336634, US9305292, US9275517, US9256867, US9251453, US9240089, US9239993, US9230247, US9219708, US9208423, US9202156, US9123044, US9122965, US9117152, US9092708, US9031880, US9024719, US9004361, US8991695, US8977569, US8967464, US8960535, US8944328, US8937549, US8935367, US8925825, US8925802, US8875995, US8872619, US8867713, US8866614, US8849716, US8843057, US8818907, US8818904, US8814053, US8812402, US8794532, US8793160, US8783560, US8781905, US8781904, US8762267, US8752759, US8751391, US8751383, US8751294, US8750556, US8730012, US8707410, US8706630, US8700531, US8690055, US8684261, US8676672, US8676642, US8655309, US8635165, US8635131, US8622308, US8622300, US8606709, US8594286, US8590008, US8573494, US8566240, US8548927, US8543423, US8533111, US8533086, US8517258, US8515868, US8511548, US8504473, US8489478, US8485434, US8479980, US8477940, US8474718, US8474694, US8473395, US8469265, US8457013, US8451122, US8447672, US8447670, US8439271, US8429041, US8423453, US8410936, US8408463, US8408455, US8393535, US8336784, US8306907, US8301493, US8294552, US8289136, US8286862, US8284025, US8279042, US8276811, US8267327, US8267312, US8245911, US8245909, US8244612, US8234507, US8231061, US8226013, US8189788, US8185940, US8175974, US8167198, US8160960, US8145549, US8136732, US8095459, US8091786, US8083145, US8074889, US8074872, US8072331, US8054218, US8038058, US8033451, US8020754, US8018038, US8016191, US8005756, US8001054, US7997498, US7996324, US7992779, US7991158, US7988038, US7987501, US7966496, US7961101, US7954717, US7954716, US7954715, US7953663, US7946489, US7941355, US7933835, US7933589, US7926711, US7925535, US7918396, US7918395, US7913908, US7912784, US7909242, US7899753, US7891569, US7890422, US7889052, US7886157, US7871001, US7870071, US7866552, US7860789, US7837123, US7835960, US7828214, US7818253, US7814332, US7810720, US7809643, US7809642, US7809595, US7805615, US7805378, US7805368, US7801816, US7797233, US7793845, US7784692, US7784682, US7775445, US7774274, US7768379, US7768110, US7762457, US7756896, US7756816, US7753259, US7748608, US7747463, US7746215, US7735733, US7717346, US7707111, US7705732, US7703678, US7702538, US7694876, US7690577, US7676425, US7669772, US7668750, US7650314, US7639116, US7637434, US7634448, US7604163, US7594611, US7591416, US7587756, US7581678, US7578448, US7578431, US7552867, US7547961, US7543738, US7542942, US7538418, US7520435, US7516903, US7506819, US7506818, US7503480, US7500616, US7494058, US7475045, US7463133, US7431217, US7429927, US7424977, US7422157, US7416115, US7402047, US7382911, US7360689, US7353988, US7353014, US7306158, US7303120, US7291019, US7291018, US7287695, US7267287, US7240036, US7224052, US7209903, US7207477, US7201581, US7195151, US7172112, US7127088, US7127088, US7119659, US7080782, US7072864, US7044389, US7040533, US6991157, US6991155, US6923370, US6915277, US6910624, US6905072, US6899273, US6896523, US6888445, US6877665, US6865547, US6857566, US6857563, US6854646, US6817521, US6814285, US6805287, US6792292, US6786400, US6715679, US6702181, US6580815, US6540135, US2014231527, US2014026213, US2013262163, US2013191279, US2013185782, US2012205443, US2011145044, US2011101112, US2011017836, US2010328029, US2010299221, US2010277963, US2010241563, US2010181376, US2010174612, US2010163616, US2010146590, US2010108758, US2009298540, US2009272815, US2009224033, US2009192936, US2009181721, US2009166428, US2009166408, US2009166407, US2009159695, US2009125401, US2009121829, US2009108060, US2009108056, US2009100511, US2009065587, US2009065575, US2009039156, US2009036106, US2008309551, US2008279381, US2008257954, US2008210754, US2008197533, US2008191031, US2008165006, US2008093467, US2008061151, US2008061150, US2008054078, US2008023562, US2008021824, US2007215687, US2007111554, US2007102799, US2007102798, US2007102530, US2007016798, US2007014408, US2007014407, US2006270454, US2006228910, US2006228909, US2006226217, US2006186209, US2006183355, US2006118621, US2006064372, US2006027655, US2006022045, US2006022044, US2006022043, US2006022042, US2006022033, US2005269415, US2005269402, US2005269401, US2005189426, US2005189416, US2005148367, US2005121512, US2005087597, US2005080728, US2005039976, US2005035200, US2004233628, US2004233046, US2004232229, US2004232228, US2004232225, US2004205023, US2004185685, US2004164145, US2004117300, US2004111361, US2004084524, US2004074146, US2004050928, US2004010696, US2003229506, US2003225623, US2003222136, US2003209793, US2003172027, US2003158819, US2003156740,

US2003144942, US2003144935, US2003139984, US2003131247, US2003127824, US2003121969, US2003112613, US2003112611, US2003066880, US2002145043, US2002052193, US2001034760, US2001034717, GB2456020, GB2456020, EP2158561, EP1521220, EP1446759, EP1161060, CN104809095, CN104424454, CN103493072, CN103493072, CN102831709, CN102346838, CN102346838,

Abstract:
Source: US6315195B A transaction apparatus (10) includes a multifunction card (12) and a portable terminal (14). The multifunction card includes a programmable memory (18) and a magnetic stripe (16) thereon. The programmable memory on the card is used to store indicia corresponding to account data which is input to the memory by reading with the terminal magnetic stripe data from a plurality of conventional magnetic stripe cards. The programmable memory further includes data representative of cash value as well as instructions, prompt messages and icons presented in conducting transactions. A user is enabled to operate the apparatus to select one of the accounts stored in memory, and to write account data corresponding to the selected account to the magnetic stripe of the card. The user is also enabled to use the apparatus to enter visible indicia such as bar codes and to selectively reproduce the bar codes on the display of the apparatus. The apparatus is also selectively operative to transfer funds between accounts of the user and data representative of cash value stored on the card.

0) US2008047962A – DEVICE FOR BEVERAGE CANS, COMPRISING A COVER AN...

65) Family number: 34676227 (US2008047962A) © PatBase

Title: DEVICE FOR BEVERAGE CANS, COMPRISING A COVER AND HOLE

Priority: ES20040002650 20041115 ES20040002650U 20041115 WO2006ES00615 20060526 WO2005ES00615 20051114 WO2005ES00615 20060526

Family:

Publication number	Publication date	Application number	Application date
AR052797 AA	20070404	AR2005P104888	20051122
EP1826132 A1	20070829	EP20050815460	20051114
ES1058995 UA	20050301	ES20040002650U	20041115
ES1058995 Y1	20050801	ES20040002650U	20041115
US2008047962 AA	20080228	US20060667818	20060526
WO06053922 A1	20060526	WO2005ES00615	20051114

Probable Assignee: MURIEL SALVADOR ENRIQUE

Assignee(s):(std)**:** MURIEL SALVADOR ENRIQUE

Inventor(s):(std)**:** MURIEL SALVADOR ENRIQUE

Agent(s): KATTEN MUCHIN ROSENMAN LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B65D17/32 B65D17/50 B65D25/48 B65D41/62 B65D51/00 B65D51/18 (Advanced/Invention); B65D17/00 B65D25/38 B65D41/00 B65D51/00 B65D51/18 (Core/Invention)

International class (IPC 1–7): B65D17/32 B65D25/48 B65D41/62 B65D51/00 B65D51/18

CPC: B65D17/166 B65D51/007 B65D2517/0014 B65D2517/0025 B65D2517/0043 B65D2517/0044

European class: B65D17/16B2B B65D51/00F L65D517/00Y2C L65D517/00Y3B L65D517/00Y5D2 L65D517/00Y5D3

US class: 220/256.1 220/256.100 220/259.1 220/259.100

Classification Explorer

Cited documents: US7089825 BB, US7021481 BB, US7017769 BA, US6637616 BB, US6073797 A, US5823384 A, US5813559 A, US5720412 A, US5699927 A, US5456380 A, US5402904 A, US5240132 A, US5203467 A, US5147066 A, US5125525 A, US5117980 A, US5110002 A, US5108003 A, US5088614 A, US5054640 A, US5031264 A, US4961510 A, US4938379 A, US4927048 A, US4917258 A, US4915252 A, US4887712 A, US4679702 A, US4387826 A, US4066191 A, US3429478 A, US3197089 A, US3187964 A, US2764200 A, US2459558 A, US2071638 A, US2008149650 AA, US2007221676 AA, US2007062951 AA, US2007051725 AA, US2006289548 AA, US2006226147 AA, US2003146226 AA, US1944045 A, GB2342917 A1, EP2193761, EP0870685 A1, EP0645315 A1, DE29616305 U1, DE2246277 A1, DE19638854 A1,

Forward Citations: WO12109260, WO12010258, WO11057405, WO10123358, USD663574, US9365329, EP2502838, EP2409925, CN103003164, CN103003164,

Abstract:
Source: US2008047962A The invention relates to a device for beverage cans, which comprises a cover and a hole and which is applied to the liquid outlet. The inventive device comprises two parts (1 and 2) which are interconnected to form an assembly and which are positioned on top of one another. The lower part or base (1), which is fixed, takes the form of a ring with a central cavity (7), the position of which corresponds to the hole in the container, and a transverse protective bar (17). The upper part or cover (2), which has a precise shape and dimensions, is mobile and can move and change position, serving directly as a lid. The aforementioned two parts are preferably joined using a hinged or articulated (9) system of slide guides. In addition, the base comprises a front projection or lip protector (16). The lower face of the cover (2) is equipped with a central structure (18) which

is coupled to, and fitted in the central cavity in the base, thereby forming the closure system of the device.

0) US2016346951A – INTERLEAVING PAPER

66) Family number: 60159453 (US2016346951A) © PatBase

Title: INTERLEAVING PAPER

Priority: DE201410202525 20140212 WO2015EP52755 20150210

Family:

Publication number	Publication date	Application number	Application date
AU2015217740 AA	20150820	AU20150217740	20150210
CA2938760 AA	20160804	CA20152938760	20150210
CN106061695 A	20161026	CN201580008603	20150210
EP3105020 A1	20161221	EP20150703779	20150210
MX2016010264 A1	20161028	MX20160010264	20150210
US2016346951 AA	20161201	US20150116733	20150210
WO15121251 A1	20150820	WO2015EP52755	20150210

Probable Assignee: GEA FOOD SOLUTIONS GERMANY GMBH

Assignee(s):(std)**:** GEA FOOD SOLUTIONS GERMANY GMBH

Assignee(s): HORBERG WINFRIED ; BOCHTLER ALOIS

Inventor(s):(std)**:** ALOIS BOCHTLER ; BOCHTLER ALOIS ; HOERBERG WINFRIED ; HORBERG WINFRIED ; WINFRIED HOERBERG

Agent(s): SPRUSON AND FERGUSON; FETHERSTONHAUGH AND CO; KUTZENBERGER WOLFF AND PARTNER; WOLFF FELIX ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B26D1/12 B26D1/157 B26D7/01 B26D7/32 B29C39/02 B29C45/00 B29C67/00 B33Y10/00 B33Y80/00 (Advanced/Invention)

CPC: B26D1/141 B26D1/1575 B26D1/12 B26D7/01 B29C67/0051 B29C45/00 B29C39/02 B33Y10/00 B33Y80/00 B29L2031/28 B26D7/325 B26D2210/02

US class: 426/90

Classification Explorer

Cited documents: US9399531 BB, US5724874 A, US5051268 A, US4852441 A, US4534548 A, US3991168 A, US3772040 A, US3481746 A, US3019578 A, US2015053057 AA, DE8237311 U, DE19926461 A1, DE19913203 A1,

Abstract:
Source: US2016346951A The invention relates to a device for inserting an interleaving paper between a first and a second food slice, or a second and third food slice, a third and fourth food slice, etc., wherein the interleaving paper is guided in a channel and, in a time interval between the slicing of the first food slice and the slicing of the second food slice, exits the channel and enters a slicing region, wherein the channel is designed in such a way that the channel shapes the flat cross−section of the interleaving paper. The invention further relates to a slicing device and an interleaving paper.

0) US5472138A – WRAP–AROUND CARTON WITH IMPROVED LOCKING MEANS

67) Family number: 8722734 (US5472138A) © PatBase

Title: Wrap–around carton with improved locking means

Priority: US19950416397 19950406 US19950418100 19950406 WO1996US03394 19960313 WO1996US00033 19960313 US19950418101 19950406

Family:

Publication number	Publication date	Application number	Application date
AU199652504 A1	19961023	AU19960052504	19960313
BRPI9605781 A	19971014	BR1996PI05781	19960313
CA2189874 AA	19961107	CA19962189874	19960313
CL1996000515 A1	19961230	CL19960000515	19960402
CL1996000527 A1	19961230	CL19960000527	19960403
CL1996000535 A1	19970108	CL19960000535	19960404
CO4480051 A1	19970709	CO19960013815	19960320
EP0758980 A1	19970226	EP19960908771	19960313
IL117819 A0	19960804	IL19960117819	19960403
JP10501504 T2	19980210	JP19960529441T	19960313
KR19970701652 A	19970412	KR19960704921	19960906
KR19970701654 A	19970412	KR19960704939	19960907
KR19970702146 A	19970513	KR19960705490	19961002
NO965201 A	19961205	NO19960005201	19961205
NO965201 A0	19961205	NO19960005201	19961205
TW283696 B	19960821	TW19950109865	19950920
TW297013 B	19970201	TW19950108253	19950808
US5472138 A	19951205	US19950416397	19950406
WO9631401 A1	19961010	WO1996US03394	19960313
ZA9602731 A	19970224	ZA19960002731	19960404

Probable Assignee: RIVERWOOD INT USA INC

Assignee(s):(std)**:** RIVERWOOD INT CORP

Assignee(s): RIVERWOOD INT USA INC ; RIVERWOOD INTERNATIONAL CORPUS ; RIVERWOOD INT CORPORACION DEL ESTADO DE DELAWARE CORP ; RIVERWOOD INT SOC ORGANIZADA BAJOLAS LEYES DEL ESTADO DE DELAWARE CORP ; CHEMICAL BANK ADMINISTRATIVE AGENT AS ; INGRAM STEVE ; RIVERWOOD INT

Inventor(s):(std)**:** CHARLES MCNAMARA ; COLIN FORD ; DAVID R BACCO ; DWIGHT L SMITH ; FRANK N MONCRIEF ; INGRAM STEVE

Inventor(s): JOHN P ARENA ; STEVE INGRAM ; DWIGHT LSMITH ; FRANK MONCRIEF ; CHARLES MACNAMARA

Agent(s): PHILLIPS ORMONDE FITZPATRICK; MACRAE AND CO; VILLASECA; XIMENA CASTELLANOS ABONDANO

Designated states: AT AU BE BR CA CH DE DK ES FI FR GB GR IE IT JP KR LI LU MC NL NO NZ PT SE

International class (IPC 8–9): B65B37/16 B65B41/02 B65D5/00 B65D5/02 B65D5/08 B65D5/42 B65D71/00 B65D71/12 B65D71/14 B65G59/06 B65G59/08 B65H1/02 B65H1/30 B65H29/20 B65H29/36 B65H3/08 C08L63/00 G02B5/20 (Advanced/Invention); B31B1/00 B65B35/00 B65D35/00 (Advanced/Non–invention); B65D71/00 B65D71/06 C08L63/00 G02B5/20 (Core/Invention); B65B37/16 (Core/Non–invention)

International class (IPC 1–7): B65B37/16 B65B41/02 B65D B65D5/02 B65D5/04 B65D65/10 B65D71/00 B65D71/12 B65D71/14 B65H29/20

CPC: B65D71/14 B65D2571/0016 B65D2571/00172 B65D2571/00444 B65D2571/0066 B65D2571/00716 B65H1/025 B65H1/30 B65H2511/10 B65H2511/152 B65H2511/20 B65H2701/1764 B65H3/0808 B65H2301/321

European class: B65D71/14 L65D571/00Y1A3A L65D571/00Y1A3B L65D571/00Y4A1 L65D571/00Y6A1 L65D571/00Y7A

US class: 229/103.2 229/198.2 493/137 493/139

Classification Explorer

Cited documents: US5398870 A, US5328080 A, US5311994 A, US5004147 A, US4612753 A, US4577799 A, US4498618 A, US4433806 A, US4093116 A, US4062270 A, US3356282 A,

Forward Citations: WO9809871, WO9809871, WO12037542, US9567120, US9505539, US9475628, US9376250, US9199774, US9022277, US8997986, US8376213, US8347591, US8317082, US7913844, US7798321, US7762397, US7762395, US7644817, US7448492, US7427010, US7175020, US6289651, US6223504, US6050419, US5924628, US5868308, US5647649, US2010089988, US2008257945, US2007251843, US2007241017, US2007158226, US2007017839, US2007017829, US2005199514, US2004099542, JP2002046728, EP1058655, CN103298708, AU747924,

Abstract:
Source: US5472138A A wrap−around carrier capable of being tightly drawn about the packaged articles. Locking tabs on the outer bottom panel flap and locking opening flaps on the inner bottom panel flap are folded back to provide surfaces against which oppositely directed forces can push to move the bottom panel flaps into final partially overlapped condition. The locking tabs include a base locking portion which engages an edge of the locking openings and an outer secondary locking portion which extends through an opening in the inner bottom panel flap.

0) US2007090012A – COVER FOR WRAPPING AT LEAST ONE ARTICLE, THE CO...

68) Family number: 34432714 (US2007090012A) © PatBase

Title: COVER FOR WRAPPING AT LEAST ONE ARTICLE, THE COVER BEING OF THE TYPE CONSTITUTED BY A SLEEVE OF HEAT−SHRINKABLE PLASTICS MATERIAL

Priority: CA20062565116 20061023 EP20060291559 20061006 FR20050510853 20051025 FR20050010853 20051025

Family:

Publication number	Publication date	Application number	Application date
AR060311 AA	20080611	AR2006P104643	20061024
AT414020 E	20081115	AT20060291559T	20061006
BRPI0604306 A	20070821	BR2006PI04306	20061018
CA2565116 AA	20070425	CA20062565116	20061023
CA2565116 C	20100406	CA20062565116	20061023
CN1955078 A	20070502	CN200610142531	20061023
CN1955078 B	20100825	CN200610142531	20061023
DE602006003612 D1	20081224	DE200660003612T	20061006
DK1780135 T3	20090309	DK20060291559T	20061006
EP1780135 A1	20070502	EP20060291559	20061006
EP1780135 B1	20081112	EP20060291559	20061006
ES2317469 T3	20090416	ES20060291559T	20061006
FR2892392 A1	20070427	FR20050010853	20051025
FR2892392 B1	20071228	FR20050010853	20051025
HK1099266 A1	20101224	HK20070106497	20070615
HK1099266 A3	20070810	HK20070106497	20070615
IN01957CH2006 A	20071207	IN2006CH01957	20061025
IN240085 B	20100430	IN2006CH01957	20061025
MXPA06012237 A1	20081001	MX2006PA12237	20061023
PT1780135 T	20090130	PT20060291559T	20061006
RU2006137598 A	20080427	RU20060137598	20061024
RU2353001 C2	20090420	RU20060137598	20061024
SI1780135 T1	20090430	SI20060030200T	20061006
US2007090012 AA	20070426	US20060552176	20061024
US8875887 BB	20141104	US20060552176	20061024

Probable Assignee: SLEEVER INT

Assignee(s):(std)**:** FRESNEL ERIC ; SLEEVER INT ; SLEEVER INT CO ; SLEEVER INT CO SA ; SLEEVER INTERNAT COMPANY SA ; SLEEVER INTERNAT CO ; SLIVER INTERNEHSHNL KOMPANI

Assignee(s): SLEEVER INTERNATIONAL COMPANY ; SLEEVER INTERNATONAL CO ; SLEEVER INTERNATIONAL CO ; SLEEVER INT CO SOC ANONYME ; SLEEVER INTERNATIONAL COMPANY SOCIETE ANONYME

Inventor(s):(std)**:** ERIC FRESNEL ; FRESNEL ERIC ; FRESNEL EHRIK

Inventor(s): FRESNEL' EHRIK

Agent(s): GOUDREAU GAGE DUBUC; JAUNEZ XAVIER ET AL; CABINET BOETTCHER; MCCORMICK PAULDING AND HUBER LLP

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK NL PL PT RO SE SI SK TR YU

International class (IPC 8–9): B32B27/06 B32B38/04 B32B38/06 B32B7/06 B65D23/08 B65D23/14 B65D65/00 B65D65/02 B65D65/22 B65D65/40 B65D71/00 B65D71/08 B65D8/00 B65D85/00 G09F3/02 G09F3/04 (Advanced/Invention); B32B27/06 B32B38/04 B32B38/06 B32B7/06 B65D23/00 B65D65/02 B65D65/22

	B65D65/40 B65D71/00 B65D71/06 B65D8/00 B65D85/00 G09F3/02 (Core/Invention); B65D G09F (Subclass/Invention)
International class (IPC 1–7):	B29D07/00 B29D7/00 B65D23/08 B65D23/8
CPC:	B65D23/0878 B65D2203/02 G09F3/04
European class:	B65D23/08D5 G09F3/04 L65D203/02
US class:	206/459.5 206/497 40/306
Classification Explorer	
Cited documents:	US6770345 BB, US6722495 BB, US6581973 BB, US6322864 BA, US6073377 A, US6047488 A, US5829789 A, US5704648 A, US5571358 A, US4318235 A, US4173659 A, US2004118728 AA, US2003168373 AA, US1273105 A, FR2698851 A1, EP1294614 B1, EP1294614, EP0775643 A1, EP0670807 B1, EP0670807, DE202004000865,
Forward Citations:	WO14195264, US2016325895, US2015069728, GB2520012, GB2520012, EP2810894, CN105050910, CN104411598, CN104411598, CN102575797,

Abstract:
Source: US2007090012A The present invention relates to a cover for wrapping at least one article, the cover being of the type constituted by a sleeve of heat–shrinkable plastics material suitable for closely surrounding at least a portion of the article or a group of articles. In accordance with the invention, the sleeve is constituted by superposing at least two walls secured to each another by detachable adhesive means, said walls having shrinkage characteristics that are essentially identical, and the outermost wall of the sleeve also presenting, through its entire thickness, at least one cut defining a detachable circumferential strip, said circumferential strip being printed so as to present respective patterns of printing that appear on each of its sides, the other wall(s) also presenting a pattern of printing behind the detachable circumferential strip that appears after said circumferential strip has been detached.

0) US3056368A – METHOD AND APPARATUS FOR SOLDERING CANS

69) Family number: 23108909 (US3056368A) © PatBase

Title: METHOD AND APPARATUS FOR SOLDERING CANS

Priority: US19590794422 19590219

Family:

Publication number	Publication date	Application number	Application date
ES256126 A1	19600616	ES19600256126	19600218
FR1248841 A	19601223	FR19600818796	19600217
GB945241 A	19631223	GB19600005043	19600212
US3056368 A	19621002	US19590794422	19590219

Probable Assignee: CAMPBELL SOUP CO

Assignee(s):(std)**:** BRITISH UNITED SHOE MACHINERY ; CAMPBELL SOUP CO ; UNITED SHOE MACHINERY CORP

Assignee(s): BRITISH UNITED SHOE MACHINERY CO LTD

Inventor(s):(std)**:** SILLARS FREDERICK S

International class (IPC 8–9): B23K1/16 (Advanced/Invention); B23K1/14 (Core/Invention)

International class (IPC 1–7): B21D51/28 B23K1/16

CPC: B23K1/16

European class: B23K1/16

US class: 198/443 228/136 228/256 228/44.3 228/49.1

Classification Explorer

Cited documents: US958741 A, US949763 A, US733507 A, US2876608 A, US2691260 A, US2050126 A, US2036643 A, US1918661 A, US1482197 A, US1318871 A,

Forward Citations: US4632238, US4249692, US4197976, US3307681, US3255945, US3255856, JP49115069, DE1288882, CN104175048, CN104175048,

Abstract:
Source: GB945241A 945,241. Making cans; soldering. BRITISH UNITED SHOE MACHINERY CO. Ltd. Feb. 12, 1960 [Feb. 19, 1959], No. 5043/60. Headings B3A and B3R. In soldering the side seams of can body portions, each of which side seams comprises an interlocked portion joining two lap portions comprising overlapping layers, the body portions are conveyed seriatim past solder–applying mechanism and pressure is applied to the lap portions only of the side seams to hold the layers together while the solder between the layers is allowed to solidify. The cylindrical can bodies B, Fig. 5, made of tin–coated steel, each have an interlocked side seam portion 4 extending to within a short distance of the ends of the body and at its ends lapped portions L for facilitating the fitting of the can top and bottom. The bodies are conveyed from a body maker seriatim with their seams lowermost and in alignment by dogs 28 on an endless chain 26 past a solder applying mechanism S substantially as described in Specification 900,716 and the lap compressing mechanism C. The chain 26 is supported in guides 36 by transverse studs which allow a slight upward movement against applied pressure. The mechanism C comprises an endless chain 42 having lugs 44 with the same spacing as the dogs 28, the chain 42 having the same linear speed as the chain 26 and being supported by a guide 46. The mechanism C also comprises two spaced guide members 60 which engage each body portion on each side of its seam as it passes through and leaves the solder applying mechanism S and two similar guides 64 at the exit end of the chain 42. The body portions passing along the guides 60 are deformed to elliptical shape with no gap between' the lapped portions 14, 16, Fig. 5, and while still on the guides 60 a trailing lap portion L^1, Fig. 3, of one body and a leading lap portion L^2 of the next body are engaged by the flat upper surface of a lug 44 on the chain 42 which maintains the elliptical shape. As the bodies are carried by the chains 26, 42 the solder solidifies and then the bodies move on to members 64 which allow them to return to cylindrical shape. The lapped ends of the soldered bodies are flanged outwardly and rolled with edges of can top and bottom members to form double seams.

0) US5564894A – ARTICLE SELECTION AND DELIVERY METHOD AND APPAR...

70) Family number: 20626511 (US5564894A) © PatBase

Title: Article selection and delivery method and apparatus

Priority: CA19962189875 19960313 CA19962595494 19960313 WO1996US03393 19960313 US19950418101 19950406

Family:

Publication number	Publication date	Application number	Application date
AT212600 E	20020215	AT19960908770T	19960313
AU199652503 A1	19961023	AU19960052503	19960313
AU708461 B2	19990805	AU19960052503	19960313
BRPI9605796 A	19970812	BR1996PI05796	19960313
CA2189875 AA	19961107	CA19962189875	19960313
CA2189875 C	20080916	CA19962189875	19960313
CA2595494 AA	19961010	CA19962595494	19960313
CA2595494 C	20100629	CA19962595494	19960313
CO4410363 A1	19970109	CO19960015815	19960329
DE69618871 D1	20020314	DE19966018871	19960313
DE69618871 T2	20020606	DE19966018871T	19960313
EP0759002 A1	19970226	EP19960908770	19960313
EP0759002 A4	19980422	EP19960908770	19960313
EP0759002 B1	20020130	EP19960908770	19960313
ES2170225 T3	20020801	ES19960908770T	19960313
IL117820 A0	19960804	IL19960117820	19960403
JP10501510 T2	19980210	JP19960530298T	19960313
JP3901730 B2	20070404	JP19960530298T	19960313
NO321039 B1	20060306	NO19960005203	19961205
NO965203 A	19961205	NO19960005203	19961205
NO965203 A0	19961205	NO19960005203	19961205
NZ304650 A	20000327	NZ19960304650	19960313
US5564894 A	19961015	US19950418101	19950406
WO9631419 A1	19961010	WO1996US03393	19960313
ZA9602730 A	19961009	ZA19960002730	19960404

Probable Assignee: RIVERWOOD INT CORP

Assignee(s):(std)**:** RIVERWOOD INT CORP ; GRAPHIC PACKAGING INT INC ; GRAPHIC PACKAGING INTERNATIONA

Assignee(s): CHEMICAL BANK ADMINISTRATIVE AGENT AS ; JPMORGAN CHASE BANK ADMINISTRATIVE AGENT AS ; MONCRIEF FRANK ; RIVERWOOD INT USA INC ; RIVERWOOD INT ; GRAPHIC PACKAGING INT ; RIVERWOOD INT CORP ATLANTA ; ARENA JOHN P ; BANK OF AMERICA NA ; BANK OF AMERICA NA ADMINISTRATIVE AGENT AS ; CHASE MANHATTAN BANK ; CHASE MANHATTAN BANK ADMINISTRATIVE AGENT AS

Inventor(s):(std)**:** ARENA JOHN P ; ARENA P ; FRANK MONCRIEF ; JOHN P ARENA ; MONCRIEF FRANK ; MONCRIEF FRANK N

Agent(s): PHILLIPS ORMONDE FITZPATRICK; MACRAE AND CO; XIMENA CASTELLANOS ABONDANO

Designated states: AT AU BE BR CA CH DE DK ES FI FR GB GR IE IT JP KR LI LU MC NL NO NZ PT SE

International class (IPC 8–9): B65B61/00 B65B61/20 B65G59/04 B65G59/06 B65G59/08 B65H29/24 B65H3/08 (Advanced/Invention); B65G59/06 (Advanced/Non–invention); B65B61/00 B65B61/20 B65G59/00 B65G59/02 B65G59/06 B65H29/24 B65H3/08 (Core/Invention)

International class (IPC 1–7):	B65B41/00 B65B61/00 B65B61/20 B65G47/00 B65G59/04 B65G59/06 B65G59/08 B65H29/24 B65H3/08 B65H9/00
CPC:	B65H3/0808 B65H2301/321
European class:	B65H3/08B L65H301/321 L65H332/100
US class:	271/5 271/91 271/93 414/737 414/797 414/798.9

Classification Explorer

Cited documents:	US5244343 A, US5048811 A, US5029836 A, US4806071 A, US4720227 A,
Forward Citations:	WO16139137, US6036430, US6024533, US5957655, EP3064458, EP2138983,

Abstract:
Source: US5564894A A partition inserter has a vacuum assembly which pivots out to contact an end partition in a stack, pivots back to remove the partition, and then moves downwardly to release the partition. The positioning of the vacuum assembly is controlled by a set of cams and a cam follower for controlling the horizontal position of the vacuum assembly and a third cam and cam follower for controlling the vertical position of the vacuum assembly. The vacuum assembly has an upper set of cups which move down with the assembly to lower the partition. The upper vacuum cups are also adjustably mounted to the assembly so that the same assembly may be used for partitions of various sizes. When the partition is released from the vacuum cups, the partition is guided downwardly by a pair of conveyors to a set of shooter wheels. The conveyor and shooter wheels are mounted to a set of plates which are adjustably mounted to the frame of the apparatus. The distance between the conveyors and shooter wheels can be adjusted to equal the width of the partition.

0) US6267243B – CANISTER WITH DETACHABLE PREMIUM FOR CONTAINING...

71) Family number: 15431840 (US6267243B) © PatBase

Title: CANISTER WITH DETACHABLE PREMIUM FOR CONTAINING A PARTICULATE–TYPE PRODUCT

Priority: US19990346441 19990701 US19990448044 19991123 WO2000US27585 20001004

Family:

Publication number	Publication date	Application number	Application date
AU200078648 A5	20010604	AU20000078648D	20001004
US6267243 BA	20010731	US19990448044	19991123
US6338864 BA	20020115	US19990346441	19990701
WO0138180 A1	20010531	WO2000US27585	20001004

Probable Assignee: GENERAL MILLS INC

Assignee(s):(std)**:** DEERING CURTIS J ; GEN MILLS INC ; MEIER GORDON H ; MOBERG SARAH J ; SUMPMANN PATRICK J

Assignee(s): GENERAL MILLS INC

Inventor(s):(std)**:** MEIER GORDON ; MEIER GORDON H ; MOBERG SARAH ; MOBERG SARAH J ; DEERING CURTIS ; DEERING CURTIS J ; SUMPMANN PATRICK ; SUMPMANN PATRICK J

Inventor(s): GORDON H MEIER ; PATRICK J SUMPMANN ; SARAH J MOBERG ; CURTIS J DEERING

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

International class (IPC 8–9): B65D3/22 B65D5/42 (Advanced/Invention)

International class (IPC 1–7): B65D25/14 B65D5/42 B65D55/00 B65D85/00

CPC: Y10S206/831 B65D3/22 B65D5/4229

European class: B65D3/22 B65D5/42E1D

US class: 206/459.5 206/831 229/122.32 229/4.5 229/45 426/106 426/112 426/115 426/127 426/394 426/398 493/53

Classification Explorer

Cited documents: WO9930974 A1, WO9014950 A1, US5996887 A, US5882746 A, US5727819 A, US5672030 A, US5591290 A, US5586681 A, US5566529 A, US5484167 A, US5366142 A, US5324559 A, US5199662 A, US5172936 A, US5141254 A, US5100180 A, US5098131 A, US5078273 A, US5057359 A, US5021274 A, US5007578 A, US4889884 A, US4880964 A, US4842303 A, US4840275 A, US4819829 A, US4813545 A, US4768703 A, US4724166 A, US4673126 A, US4537586 A, US4498581 A, US4430816 A, US4353764 A, US4345393 A, US4324823 A, US4324058 A, US4311746 A, US4308679 A, US4306934 A, US4306367 A, US4171085 A, US3994089 A, US3960793 A, US3958744 A, US3914483 A, US3768719 A, US3389850 A, US3387762 A, US3269635 A, US3207411 A, US3155273 A, US3110121 A, US2971686 A, US2889976 A, US2643811 A, US2532857 A, US2209200 A, US2153911 A, US2142470 A, US1344664 A, GB2084509 A1,

Forward Citations: USD635465, US8932428, US8807339, US8794294, US8490792, US8393886, US8360263, US8267250, US8240476, US8191708, US8146797, US8146796, US7967510, US7686513, US7608317, US7526997, US7416768, US7350460, US7189300, US7152524, US6510981, US2012199048, US2010278454, US2009261004, US2008147489, US2007289457, US2007062384, US2007014898, US2007011993, US2006285780, US2006198986, US2005079322, US2005025941, US2004177593, US2004163978, US2004103055, US2004101159, US2004101158, US2003106926, EP2256047, EP2253551, EP2253550, EP1930244,

Abstract:
Source: US6267243B A canister for containing a particulate−type product. The canister includes at least one side wall, a top closure and a bottom closure. The side wall defines at least a portion of an internal storage region having an upper opening and a lower opening. The side wall includes a first paper−based layer, a second layer and an adhesive. The first layer includes a main body portion and a premium. The body portion and the premium are integrally formed such that the premium is selectively detachable from the body portion. The body portion and the premium each define an inner surface and an outer surface. The second layer has an inner surface and an outer surface. The adhesive bonds the inner surface of the body portion to the outer surface of the second layer, but does not impede detachment of the premium from the body portion. The top closure is connected to the side wall to encompass the upper opening. The bottom closure is connected to the side wall so as to encompass the lower opening. With this configuration, the second layer maintains a structural integrity of the canister upon detachment of the premium.

0) CO4410294A – PROCESO PARA LA ELABORACION DE UNA PIEZA BASICA...

72) Family number: 43685499 (CO4410294A) © PatBase

Title: PROCESO PARA LA ELABORACION DE UNA PIEZA BASICA UNITARIA PA– RA LA FABRICACION DE CALZADO Y PRODUCTO CON EL OBTENIDO PROCESS FOR THE PREPARATION OF A PIECE BASIC UNIT PA– RA shoemaking AND PRODUCT OBTAINED WITH (Machine translation)

Priority: CO19960009379 19960228

Family:

Publication number	Publication date	Application number	Application date
CO4410294 A1	19970109	CO19960009379	19960228

Probable Assignee: ANDRADE ROLDAN JESUS

Assignee(s):(std)**:** ANDRADE ROLDAN JESUS

Assignee(s): JESUS ANDRADE ROLDAN

Inventor(s):(std)**:** ANDRADE ROLDAN JESUS

Inventor(s): JESUS ANDRADE ROLDAN

Agent(s): JESUS ANDRADE DE ROLDAN

International class (IPC 8–9): A43B10/00 A43B13/00 (Advanced/Invention); A43B13/00 (Core/Invention)

International class (IPC 1–7): A43B10/00 A43B13/00

Classification Explorer

Abstract:
Source: CO4410294A 1.– PROCESO PARA LA ELABORACION DE UNA PIEZA UNI– TARIA BASICA PARA LA FABRICACION DE CALZADO CARAC– TERIZADO PORQUE, SE PARTE DEL MOLDE PREVIAMENTE E– LABORADO QUE POSEE LA FORMA Y TEXTURA OPTIMOS; SE TOMA LA MEZCLA POLIMERICA ESPECIFICA LA CUAL HA SIDO PREVIAMENTE LAMINADA; SE PESA LA CANTIDAD A– PROPIADA DE ACUERDO AL ESPESOR DEL MOLDE, DADO POR LA TALLA Y EL TIPO DE ZAPATO, EL MATERIAL POLIME– RICO SE COLOCA DISTRIBUIDO UNIFORMEMENTE DENTRO DEL MOLDE DE MANERA QUE ESTE QUEDE RECUBIERTO COM– PLETAMENTE EN SU PARTE INTERNA; LUEGO COLOCAR SO– BRE ESTA EL TEJIDO DE ALGODON TIPO LONA; LUEGO SE SELLA EL MOLDE CON LA TAPA, PROCEDIENDO A LA VUL– CANIZACION, A UNA PRESION DE 10000–18000KPa Y A U– NA TEMPERATURA DE 150 A 180GRADOS CENTIGRADOS DU– RANTE UN TIEMPO APROXIMADO DE 10 MINUTOS. FIGURA 1 1. PROCESS FOR THE PREPARATION OF A PIECE FOR BASIC unitary shoemaking characterized in that, IS PART OF MOLD THAT HAS PREVIOUSLY worked E– shape and texture OPTIMOS; TAKES THE SPECIFIC polymer mixture which has been previously LAMINADA; WEIGHING THE A– PROPIADA AMOUNT TO THE THICK OF MOLD, DIE BY SIZE AND TYPE OF SHOE, THE MATERIAL polymeric RICO STANDING distributed evenly within the mold so that it clicks COATED completely on the inside; THEN THIS PLACE onto cotton fabric CANVAS TYPE; Then sealed the mold with the CAP, proceeding to the vulcanization, at a pressure of 10000–18000KPa YA NA U– temperature of 150 to 180 degrees CELSIUS DURING AN ESTIMATED TIME OF 10 MINUTES. Figure 1

0) US5447299A – DIVIDER SHEET FOR STACKED PRODUCTS AND METHOD O...

73) Family number: 42123928 (US5447299A) © PatBase

Title: DIVIDER SHEET FOR STACKED PRODUCTS AND METHOD OF SUPPLYING PLANAR ARTICLES

Priority: US19940192888 19940204 US19950458140 19950602 WO1994US14598 19941219

Family:

Publication number	Publication date	Application number	Application date
AU199513742 A1	19950821	AU19950013742	19941219
AU683525 B2	19971113	AU19950013742	19941219
BRPI9405761 A	19951128	BR1994PI05761	19941219
CA2157028 AA	19950825	CA19942157028	19941219
CL1995000175 A1	19960318	CL19950000175	19950203
CO4230176 A1	19951019	CO19950004208	19950203
EP0693036 A1	19960124	EP19950904939	19941219
EP0693036 A4	19960814	EP19950904939	19941219
FI954060 A	19950830	FI19950004060	19950830
FI954060 A0	19950830	FI19950004060	19950830
JP8508704 T2	19960917	JP19950520602T	19941219
KR19960700932 A	19960224	KR19950703660	19950830
NO953927 A	19951003	NO19950003927	19951003
NO953927 A0	19951003	NO19950003927	19951003
NZ277998 A	19970129	NZ19940277998	19941219
US5447299 A	19950905	US19940192888	19940204
US5826870 A	19981027	US19950458140	19950602
WO9521117 A1	19950810	WO1994US14598	19941219
ZA9500873 A	19951013	ZA19950000873	19950203

Probable Assignee: RIVERWOOD INT USA INC

Assignee(s):(std)**:** RIVERWOOD INT CORP

Assignee(s): RIVERWOOD INT ; RIVERWOOD INT USA INC ; MAY KEVIN T ; RIVERWOOD INT CORPORACION DEL ESTADO DE DELAWARE CORP ; BANK OF AMERICA NA ; BANK OF AMERICA NA ADMINISTRATIVE AGENT AS ; CHASE MANHATTAN BANK ADMINISTRATIVE AGENT AS ; CHASE MANHATTAN BANK AS ADMINISTRATIVE AGENT ; CHEMICAL BANK ADMINISTRATIVE AGENT AS ; CHEMICAL BANK AS ADMINISTRATIVE AGENT

Inventor(s):(std)**:** MAY KEVIN T ; VULGAMORE GARY

Inventor(s): KEVIN T MAY

Agent(s): PHILLIPS ORMONDE FITZPATRICK; MACRAE AND CO; VILLASECA; XIMENA CASTELLANOS ABONDANO

Designated states: AT AU BE BR CA CH DE DK ES FI FR GB GR IE IT JP KR LI LU MC NL NO NZ PT SE

International class (IPC 8–9)**:** B65B43/18 B65D79/00 B65H1/24 B65H3/00 B65H3/08 B65H3/26 B65H3/30 B65H3/34 B65H3/46 B65H39/00 B65H5/00 (Advanced/Invention); B65B35/00 B65H3/30 (Advanced/Non–invention); B65B43/00 B65D79/00 B65H1/08 B65H3/00 B65H3/08 B65H3/30 B65H3/46 B65H39/00 (Core/Invention)

International class (IPC 1–7)**:** B65D25/04 B65D79/00 B65G B65H B65H3/26 B65H3/30 B65H3/46 B65H3/50 B65H5/00

CPC: Y10T428/24314 B65B43/185 B65H1/24 B65H3/085 B65H3/34 B65H3/46 B65H39/00 B65H2701/176

European class: B65B43/18C B65H1/24 B65H3/08B4 B65H3/34 B65H3/46 B65H39/00

US class: 221/211 221/26 221/41 271/1 271/104 271/166 271/167 271/31.1 271/311 271/99 428/136

Classification Explorer

Cited documents: US5447299 A, US5246113 A, US5131899 A, US5105931 A, US5067702 A, US5057066 A, US5048811 A, US4518301 A, US4505422 A, US4015768 A, US3819057 A, US3750931 A, US3411695 A, US3215427 A, US3210072 A, US3049347 A, US2935315 A, US2863661 A, US2342571 A, US2264489 A,

Forward Citations: WO13130219, WO12006484, WO12006484, US9284090, US9132936, US8800853, US8628000, US8586168, US8459535, US8127980, US7717321, US7658317, US7530209, US7475778, US7240789, US7157130, US6833101, US6145830, US5826870, US2012009384, US2010187295, US2008072533, US2007022714, US2006272971, US2006255044, US2006180488, US2006135603, US2005167291, US2005064434, JP2010504256, DE19813619,

Abstract:
Source: US5447299A A planar article or sheet, such as a divider sheet for stacked products, and the method of supplying substantially planar articles from a supply magazine to an article transfer device, which then transfers the article to a desired location for further processing. The planar article itself can be a divider sheet for stacked beverage containers, folded paperboard cartons for carriers, or any other substantially planar article which is adapted to be consecutively arranged with other such articles in a group, and placed in a supply magazine for singular delivery to an article transfer device. The method of the present invention is specifically designed to insure that only one sheet at a time is removed from the group by the article transfer device. The sheets or articles themselves, are designed to cooperate with the supply magazine to facilitate singular delivery. The articles also can incorporate several features, alone or in combination, which reduce the likelihood that consecutive articles will adhere to one another and be unintentionally removed from the stack of articles upon the intended removal of one article by the transfer device.

74) Family number: 30754300 (US2004180059A) © PatBase

Title: PARENTERAL FORMULATIONS OF A PEPTIDE FOR THE TREATMENT OF SYSTEMIC LUPUS ERYTHEMATOSUS

Priority: US20030439950 20030114 US20030439950P 20030114 US20070985068 20071112 US20040758572 20040114 WO2004US00955 20040114

Family:

Publication number	Publication date	Application number	Application date
AU2004206844 AA	20040805	AU20040206844	20040114
BRPI0406737 A	20051220	BR2004PI06737	20040114
CA2513331 AA	20050714	CA20042513331	20040114
CN1761477 A	20060419	CN200480006991	20040114
CO5640149 A2	20060531	CO20050079319	20050810
CR7936 A	20060531	CR20050007936	20050809
EA008438 B1	20070629	EA20050001129	20040114
EA200501129 A1	20060224	EA20050001129	20040114
ECSP055960 A	20060419	EC2005SP05960	20050811
EP1587525 A2	20051026	EP20040702214	20040114
EP1587525 A4	20080910	EP20040702214	20040114
HK1076057 A3	20060106	HK20050110546	20051122
IL169573 A0	20060221	IL20040169573	20040114
IN03481DN2005 A	20061229	IN2005DN03481	20050804
IN235111 B	20090731	IN2005DN03481	20050804
IS7971 A	20050805	IS20050007971	20050805
JP2006516034 T2	20060615	JP20060500958T	20040114
KR20050100616 A	20051019	KR20057013097	20050714
MXPA05007552 A1	20060519	MX2005PA07552	20040114
NO20053761 A	20051012	NO20050003761	20050808
NO20053761 A0	20050808	NO20050003761	20050808
NZ541659 A	20070531	NZ20040541659	20040114
UA83816 C2	20080826	UA20050007998	20040114
US2004180059 AA	20040916	US20040758572	20040114
US2008287366 AA	20081120	US20070985068	20071112
US7294687 BB	20071113	US20040758572	20040114
WO04064788 A2	20040805	WO2004US00955	20040114
WO04064788 A3	20050324	WO2004US00955	20040114
ZA200506205 A	20061227	ZA20050006205	20050803

Probable Assignee: YEDA RESEARCH AND DEVELOPMENT CO

Assignee(s):(std)**:** COHEN VERED SHARON ; GILBERT ADRIAN ; NAFTALI ESMIRA ; KLINGER ETY ; TAVA PHARMACEUTICALS IND LTD ; TEVA PHARMA ; WEINSTEIN VERA ; TEVA PHARMACEUTICAL INDUSTRIES LTD

Assignee(s): TEVA PHARACEUTICAL IND LTD ; TEVA PHARMACEUTICAL IND ; YEDA RESEARCH AND DEVELOPMENT CO ; TEVA PHARMACEUTICAL IND LTD ; TEVA PHARMACEUTICALS USA INC ; TEVA PHARMACEUTICAL INDUSTRIES LIMITED ; TAVA PHARMACEUTICALS INDUSTRIES LTD

Inventor(s):(std)**:** ADRIAN GILBERT ; COHEN VERED SHARON ; ESMIRA NAFTALI ; NAFTALI ESMIRA ; GILBERT ADRIAN ; KLINGER ETY ; NFTALI ESMIRA ; ETY COHEN VERED SHARON NAFTALI ; ETY KLINGER ; ESMIRA NEFTALI ; WEINSTEIN VERA ; VERA WEINSTEIN ; SHARON COHEN VERED

Inventor(s):

KLINGER ETR ; COHEN VERED SHARON NAFTALI ESMIRA WEINSTEIN ; COHEN VERED SHARON NAFTALI ESMIRA WEINSTEIN VERA G

Agent(s): FB RICE; HEENAN BLAIKIE LLP; SILVANA MARIA LOPEZ DIAZ; JOHN P WHITE COOPER AND DUNHAM LLP; COOPER AND DUNHAM LLP; JOHN P

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A61K31/724 A61K31/74 A61K38/00 A61K38/10 A61K39/00 A61K39/38 A61K39/395 A61K47/40 A61K47/48 A61K51/10 A61K9/00 A61K9/19 A61P37/00 A61P37/02 A61P37/06 (Advanced/Invention);
A61K38/00 A61K38/10 A61K47/40 C07K7/08 (Advanced/Non–invention);
A61K39/395 A61P37/00 (Core/Invention);
A61K (Subclass/Invention)

International class (IPC 1–7): A61K31/724 A61K38/00 A61K38/10 A61K39/00 A61K39/38 A61K47/40 A61K51/10

CPC: A61K9/0019 A61K9/19 A61K31/724 A61K38/10 A61K47/48969 B82Y5/00

European class: A61K31/724 A61K38/10 A61K47/48W18B A61K9/00M5 A61K9/19 B82Y5/00

US class: 424/184.1 424/184.100P 424/78.08 514/1.1 514/1.100P 514/13 514/20.6 514/20.600S 514/58 514/58S 530/300

Classification Explorer

Cited documents: WO9931066 A1, WO9630057 A1, WO03067848 A1, WO02067848 A2, US7294687 BB, US6613536 BA, US6407079 BA, US6228363 BA, US5997856 A, US5730969 A, US5646131 A, US5376645 A, US5134127 A, US5126249 A, US4656158 A, US2005008634 AA, US2004180059 AA, US2004127408 AA, US2002054872 AA, EP0495049 A1,

Forward Citations: WO06027116, WO06027116, US8865868, US7858738, US2010160442, US2009169559, US2008287366, US2008176946, US2008119390,

Abstract:
Source: US2004180059A The subject invention provides a pharmaceutical composition comprising an aqueous carrier; from 0.1 mg/ml to 20 mg/ml of the composition of a pharmaceutically acceptable salt of a peptide having the structural formula NH 2–Gly Tyr Tyr Trp Ser Trp Ile Arg Gln Pro Pro Gly Lys Gly Glu Glu Trp Ile Gly– COOH; and a substituted beta–cyclodextrin in an amount effective to dissolve the peptide in the aqueous carrier, wherein the composition has a pH between 4 and 9, a process for preparation, and a method of alleviating symptoms of systemic lupus erythematosus (SLE) in a human subject comprising administering to the human subject the pharmaceutical composition.

0) US6595550B – GUARANTEE SEAL FOR FOOD PRODUCTS AND A MACHINE ...

75) Family number: 12659284 (US6595550B) © PatBase

Title: Guarantee seal for food products and a machine for its automatic application to the product

Priority: CA19992272787 19990520 PT19980102157 19980521

Family:

Publication number	Publication date	Application number	Application date
AR016492 AA	20010704	AR1999P102398	19990520
AT252493 E	20031115	AT19990830302T	19990514
BRPI9901564 A	20000104	BR1999PI01564	19990520
CA2272787 AA	19991121	CA19992272787	19990520
CA2272787 C	20080129	CA19992272787	19990520
CN1238508 A	19991215	CN19991006770	19990521
DE69912187 D1	20031127	DE19996012187	19990514
DE69912187 T2	20040715	DE19996012187T	19990514
EP0960822 A1	19991201	EP19990830302	19990514
EP0960822 B1	20031022	EP19990830302	19990514
ES2209373 T3	20040616	ES19990830302T	19990514
HU227801 B1	20120328	HU19990001671	19990520
HU9901671 A0	19990728	HU19990001671	19990520
HU9901671 AB	20000528	HU19990001671	19990520
HU9901671 AC	20010528	HU19990001671	19990520
IL127736 A0	20010128	IL19980127736	19981224
IL127736 A1	20050124	IL19980127736	19981224
JP2000025796 A2	20000125	JP19990142083	19990521
PL191699 B1	20060630	PL19990333298	19990521
PL333298 A1	19991122	PL19990333298	19990521
PT102157 A	19991130	PT19980102157	19980521
PT960822 T	20040331	PT19990830302T	19990514
US6595550 BA	20030722	US19990315610	19990520

Probable Assignee: ITA INDUSTRIA TECNICA ALIMENTARE SRL

Assignee(s):(std): RENIO COM E CONSULTADORIA LDA ; I T A IND TECNICA ALIMENTARE S ; I T A IND TECNICA ALIMENTARE S R I ; I T A IND TECNICA ALIMENTARE S R L ; RENIO LDA

Assignee(s): RENIO COMERCIO E CONSULTORIA LDA ; I T A INDUSTRIA TECNICA ALIMENTARE S R I ; I T A INDUSTRIA TECNICA ALIMENTARE S R I BRESIA ; RENIO COMERCIO E CONSULTADORIA LDA ; ITA INDUSTRIA TECNICA ALIMENTARE SRL ; ITAINDUSTRIA TECNICA ALIMENTARE SRL ; RENIO COMERCIO E CONSULTADORIA LDA TERCEIO ANDAR F ; I T A INDUSTRIA TECNICA ALIMENTARE S R L ; I T A INDUSTRIA TECNICA ALIMENTARE S R L BRESCIA ; I T A INDUSTRIA TECNICA ALIMENTARE SRL ; MEAZZI ALBERTO

Inventor(s):(std): MEAZZI ALBERTO

Inventor(s): ALBERTO MEAZZI ; AMEAZZI

Agent(s): ROBIC; EITAN PEARL LATZER AND COHEN ZEDEK

Designated states: AT BE CH DE DK ES FR GB GR IT LI NL PT

International class (IPC 8–9): B65B51/04 B65B51/06 B65B51/08 B65C3/02 B65C3/26 B65C9/26 B65D33/16 B65D33/26 B65D53/08 B65D65/22 G09F3/03 (Advanced/Invention); B65B51/00 B65C3/00 B65D33/16 B65D53/00 B65D65/22 (Core/Invention)

International class (IPC 1–7): B42D15/00 B65B51/04 B65B51/08 B65B51/10 B65C B65C11/02 B65C3/02 B65C3/26 B65C9/26 B65D33/16 B65D33/25 B65D33/26 B65D33/30 B65D53/08 B65D65/22 G09F3/00 G09F3/03 G09F3/04

CPC: B65B51/065 B65D33/1616

European class: B65B51/06C B65D33/16D

US class: 283/79 283/81 40/299

Classification Explorer

Cited documents: US5560657 A, US5366249 A, US4112603 A, US3973294 A, US3327514 A, US3228129 A, JP60085917 U1, JP60081836 U1, JP53102186 A2, JP53049593 A2, FR2687129 A1, DE2453747 A1, BE421094 A,

Forward Citations: WO11015968, WO08022213, WO07027810, USD663229, USD649900, USD646333, USD630126, US8663768, US7676947, US2011091671, US2008295351, JP5746140, JP2014006468, JP2012522700, DE102011083900, CN105416922, CN102490954,

Abstract:
Source: US6595550B The invention refers to a seal of guarantee (10) for foodstuff wrapped in a packaging, which closes said packaging and which has the shape of a label, having a tab (11) which can be folded down on to itself to cover a sufficient portion of the packaging, with a zone (12) where it is possible to write information regarding the product, such as the production and best before dates. The invention also refers to a machine to automatically apply the seal (10) which fundamentally includes a loader (17) containing a pile of seals, which are picked up one at a time from the underside, a cursor (19) which handles the seals to be applied, a tool (21) to fold the tab (11) and a seal applicator head (18) for ultrasonic welding, gluing or similar.

0) CO4560544A – GENERO ABSORBENTE NO TEJIDO QUE CONTIENE FIBRAS...

76) Family number: 43631450 (CO4560544A) © PatBase

Title: GENERO ABSORBENTE NO TEJIDO QUE CONTIENE FIBRAS COMBINADAS DE FILAMENTOS LARGOS DE POLIESTER POLIETILENO Y FIBRAS ABSORBENTES GENUS ABSORBENT NON–WOVEN FIBERS CONTAINING COMBINED LONG FILAMENTS OF POLYESTER POLYETHYLENE AND ABSORBENT FIBERS (Machine translation)

Priority: CO19920213787 19820709 CO19920213787 19920709 CO19920922137 19920709

Family:

Publication number	Publication date	Application number	Application date
CO4560544 A1	19980210	CO19920213787	19820709

Probable Assignee: CHICOPEE

Assignee(s):(std)**:** CHICOPEE

Inventor(s):(std)**:** MAYS ALFRED THOMAS ; FEKETE PAUL

Inventor(s): ALFRED THOMAS MAYS ; PAUL FEKETE

Agent(s): ANDRES LLOREDA

International class (IPC 8–9)**:** A61F13/18 D01F6/92 D04H5/06 (Advanced/Invention); D01F6/92 D04H5/00 (Core/Invention)

International class (IPC 1–7)**:** A61F13/18 D01F6/92 D04H5/06

Classification Explorer

Abstract:
Source: CO4560544A 1. UN GENERO ABSORBENTE NO TEJIDO, LIGADO TER– MICAMENTE, QUE TIENE UNA DENSIDAD MASIVA POR DEBA– DE CERCA DE 0.15 GRAMOS POR CENTIMETRO CUBICO, COMPRENDIENDO DICHO GENERO FIBRAS ABSORVENTES Y FIBRAS COMBINADAS DE FILAMENTOS LARGOS, ESTANDO COMPUESTAS DICHAS FIBRAS CONBINADAS DE POLIETILENO Y POLIESTER, EN EL CUAL UNA PROPORCION SUBSTANCI– AL DE LAS SUPERFICIES DE DICHAS FIBRAS COMBINADAS COMPRENDEN DICHO POLIETILENO. 37. UN PROCESO QUE COMPRENDE: A) PRODUCIR UN EMBRAMADOQUE CONTIENE FIBRAS ABSORBENTES Y FIBRAS COMBINADAS DE FILAMENTOS LARGOS, ESTANDO COMPUESTAS DE POLIETILENO Y POLI– ESTER, EN EL CUAL UNA PROPORCION SUSTANCIAL DE LA SUPERFICIE DE DICHAS FIBRAS COMBINADAS COMPRENDEN DICHO POLIETILENO; B. SOMETER DICHO ENTRAMADO A UNA TEMPERATURA SUFICIENTE PARA FUNDIR DICHO POLIETILENO SIN FUNDI DICHO POLIESTER, MIENTRAS SE MANTIENE DICHO ENTRAMADO BAJO PRESION MINIMA; Y C) ENFRIAR DICHO ENTRAMADO PARA SOLIDIFICAR NUEVAMENTE DICHO POLIETILENO, PARA PRODUCIR EN CONSECUENCIA UN GENERO NO TEJIDO DE BAJA DENSI– DAD, ALTAMENTE ABSORVENTE Y LIGADO TERMICAMENTE. 40. DISPOSITIVO CATENIL QUE COMPRENDE EL GENERO NO TEJIDO DE LA REIVINDICACION 1. ss VER FIGURA 1. A GENDER ABSORBENT NON–WOVEN, LINKED TER – THERMICALLY, WHICH HAS A MASS DENSITY BY DEBA – OF ABOUT 0.15 GRAMS PER CENTIMETER CUBIC, UNDERSTANDING THAT GENDER ABSORBENT FIBERS AND FIBERS COMBINED LONG FILAMENT, BEING COMPOSED THESE FIBERS: COMPOSITE OF POLYETHYLENE AND POLYESTER, IN WHICH A SUBSTANCI RATIO – TO THE SURFACES OF SUCH FIBERS COMBINED COMPRISE THE POLYETHYLENE. 37 A PROCESS THAT INCLUDES: TO) PRODUCE AN EMBRAMADOQUE CONTAINS ABSORBENT FIBERS AND FIBERS COMBINED LONG FILAMENT, BEING COMPOSED OF POLYETHYLENE AND POLY – ESTER, IN WHICH A SUBSTANTIAL PROPORTION SUCH SURFACE FIBRES COMBINED COMPRISE THE POLYETHYLENE; B. SUBMIT SAID HOUSING TO A TEMPERATURE SUFFICIENT TO MELT THE POLYETHYLENE WITHOUT THE FUNDI POLYESTER, WHILE MAINTAINING THE LOW PRESSURE MINIMUM FRAMEWORK; AND (C) COOL THE HOUSING TO SOLIDIFY AGAIN THE POLYETHYLENE, TO PRODUCE A RESULT A GENDER NON–WOVEN LOW DENSI – DAD, HIGHLY ABSORBENT AND LINKED INSULATED. 40. CATENIL DEVICE THAT INCLUDES THE GENDER NON–WOVEN CLAIM 1. ss SEE Figure

0) US2016304234A – TAMPERPROOF FOOD BOX

77) Family number: 63833447 (US2016304234A) © PatBase

Title: TAMPERPROOF FOOD BOX

Priority: US20150690545 20150420 US20160189856 20160622

Family:

Publication number	Publication date	Application number	Application date
US2016304234 AA	20161020	US20150690545	20150420
US2016304235 AA	20161020	US20160189856	20160622

Probable Assignee: HERKENRATH MICHAEL

Assignee(s):(std)**:** HERKENRATH MICHAEL

Inventor(s):(std)**:** HERKENRATH MICHAEL

International class (IPC 8–9)**:** B65D5/54 B65D5/66 (Advanced/Invention)

CPC: B65D5/54 B65D5/6611 B65D5/321 B65D5/546 B65D33/12 B65D33/18 B65D33/34 B65D43/162 B65D2101/0038 B65D5/545

US class: 229/221 229/223

Classification Explorer

Abstract:
Source: US2016304234A A re–closable tamperproof food box, including first and second main panels connected with a rear panel, the first main panel forming the bottom and the second main panel forming the top. The first main panel has two side panels and a front panel attached. The second main panel has two side panels and a front panel attached. The second main panel is connected along fourth edge to the rear panel connected along a fourth edge of the first main panel. At least one strip of adhesive is disposed on one of the two opposing side panels and the front panel of the first main panel A perforation is disposed along the second main panel, forming a tear strip. A continuous length of material on an interior surface of the second main panel, to tear through the tear strip.

0) US3907718A – 2–METHYL–4–PENTENOIC ACID ESTER FRAGRANCE

78) Family number: 5026779 (US3907718A) © PatBase

Title: 2–METHYL–4–PENTENOIC ACID ESTER FRAGRANCE

Priority:

GB19750030202 19750718 NL19750008619 19750718 NL19820000855 19820303
NL19820000855 19820303 NL19750008619 19750718 US19740490718 19740722
US19750579567 19750521 US19750569854 19750421 US19750576240 19750509
US19760683303 19760505 US19760683302 19760505 US19740490719 19740722
US19750566118 19750408 US19750569853 19750421 US19760683330 19760505

Family:

Publication number	Publication date	Application number	Application date
CH628217 A	19820226	CH19750009280	19750716
DE2530227 A1	19760205	DE19752530227	19750707
DE2530227 B2	19790920	DE19752530227	19750707
DE2530227 C3	19800529	DE19752530227	19750707
FR2292464 A1	19760625	FR19760001375	19760120
FR2292464 B1	19790202	FR19760001375	19760120
FR2324292 A1	19770415	FR19750022694	19750721
FR2324292 B1	19820730	FR19750022694	19750721
GB1524695 A	19780913	GB19750030202	19750718
GB1524696 A	19780913	GB19780014192	19750718
GB1524697 A	19780913	GB19780014193	19750718
GB1524698 A	19780913	GB19780014194	19750718
GB1524699 A	19780913	GB19780014195	19750718
GB1524700 A	19780913	GB19780014196	19750718
NL171220 B	19821001	NL19750008619	19750718
NL171220 C	19830301	NL19750008619	19750718
NL184144 B	19881201	NL19820000855	19820303
NL184144 C	19890501	NL19820000855	19820303
NL7508619 A	19760126	NL19750008619	19750718
NL8200855 A	19820802	NL19820000855	19820303
US3907718 A	19750923	US19740490718	19740722
US3931293 A	19760106	US19740490719	19740722
US3966799 A	19760629	US19750579567	19750521
US3978239 A	19760831	US19750566118	19750408
US3987803 A	19761026	US19750569854	19750421
US3998873 A	19761221	US19750569853	19750421
US4000327 A	19761228	US19750576240	19750509
US4041069 A	19770809	US19760683303	19760505
US4069828 A	19780124	US19760683302	19760505
US4094823 A	19780613	US19760683330	19760505

Probable Assignee: INT FLAVORS AND FRAGRANCES INC

Assignee(s):(std)**:** INT FLAVORS AND FRAGRANCES INC

Assignee(s): INT FLAVORS AND FRAGRANCES INC TE NEW YORK ; INT FLAVORS AND FRAGRANCES INC TE NEW YORK NEW YORK VER ST V AM ; INT FLAVORS FRAGRANCES ; INTERNATIONAL FLAVORS AND FRAGRANCES INC ; INTERNATIONAL FLAVORS FRAGRANCES ; INTERNATIONAL FLAVORS AND FRAGRANCES INC NEW YORK N Y V ST A ; INTERNATIONAL FLAVORS AND FRAGRANCES INC TE NEW YORK ; INTERNATIONAL FLAVORS AND FRAGRANCES INC TE NEW YORK NEW YORK VER ST V AM

Inventor(s):(std)**:** HALL JOHN B ; HRUZA DENIS E ; SHUSTER EDWARD J ; TSENG CHING Y ; VINALS JOAQUIN ; VINALS JOAQUIN F ; VOCK MANFRED HUGO

Inventor(s):	VOCK MANFRED HUGO LOCUST ; Y TSENG CHING ; HUGO VOCK MANFRED ; J SHUSTER EDWARD ; JOAQUIN F VINALS ; JOHN B HALL ; MANFRED HUGO VOCK ; B HALL JOHN ; CHING Y TSENG ; DENIS E HRUZA ; E HRUZA DENIS ; EDWARD J SHUSTER ; F VINALS JOAQUIN
International class (IPC 8–9):	A24B15/32 C07C17/16 C07C29/42 C07C51/15 C07C57/03 C07C69/533 C11B9/00 (Advanced/Invention) ; C07C17/00 C07C29/00 C07C51/15 C07C57/00 C11B9/00 (Core/Invention)
International class (IPC 1–7):	A23L1/226 A23L1/235 A24B15/00 A24B15/04 A24B3/12 A61K31/22 A61K47/00 A61K7/00 A61K7/46 C07C57/02 C07C57/03 C07C69/52 C07C69/533 C07C69/54 C11B9/00 C11D3/50
CPC:	C07C69/533 A24B15/32 C07C67/11 C07C67/303 C07B2200/09 C07C67/03 C07C29/42 C07C51/15 C11B9/0019 C07C17/16 C07C57/03 C07C67/27
European class:	124B69/24 124BD122X21 124BD122X21+69/52 124BD122X26 124BD20 A24B15/32 C07C17/16 C07C29/42 C07C51/15 C07C57/03 C07C69/533 C11B9/00B4B
US class:	131/17R 131/275 131/276 131/277 131/278 252/522 260/486R 424/69 426/534 510/107 512/26 560/205 560/206 560/208 560/217 562/551 562/595 562/598 562/599 562/604 570/231
Classification Explorer	
Cited documents:	US3978100 A, US3931293 A, US3764349 A, US3743657 A, US3499769 A, US3493619 A, US3382276 A, US3236869 A, US3225102 A, GB1379038 A, FR2248022 A1, FR2119580 A5,
Forward Citations:	WO9730687, WO9730687, WO15109085, WO07104727, WO06075596, WO03000766, WO0168049, US9458476, US9289011, US9265284, US8968798, US8425946, US7901512, US6800663, US6730772, US5814598, US4999451, US4833266, US4832059, US4681953, US4613457, US4529815, US4404184, US4400390, US4379079, US4368145, US4300576, US4201874, US4151181, US4139541, US4113968, US4000327, US2011182862, US2011064866, US2010255124, US2006261553, US2005203270, US2005115580, US2005020734, US2004077797, JP59021645, FR2911251, FR2805991, EP0838215, EP0098791, EP0009632,

Abstract:
Source: US3907718A Methods are described for producing 2−methyl−4−pentenoic acid and C2−C6 alkyl esters thereof comprising first reacting a 1,1,1−triethoxy propane with 2−propenol−1 to form ethyl−2−methyl−4−pentenoate; then in the alternative, (i) using said ethyl−2−methyl−4−pentenoate as such as a flavor or fragrance adjuvant or enhancer, or (ii) saponifying the ethyl−2−methyl−4−pentenoate with base to form a salt of 2−methyl−4−pentenoic acid and then acidifying the salt to form 2−methyl−4−pentenoic acid or (iii) reacting the ethyl−2−methyl−4−pentenoate with a C3−C6 lower alkanol to form a C3−C6 lower alkyl 2−methyl−4−pentenoate, in order to produce:

0) US4836363A – PACKING PLATTER FOR FOODS, WITH DECORATIVE TAB–...

79) Family number: 3018166 (US4836363A) © PatBase

Title: Packing platter for foods, with decorative tab–engaged strip

Priority: US19880230311 19880809 US19890310771 19890214

Family:

Publication number	Publication date	Application number	Application date
US4836363 A	19890606	US19880230311	19880809
US4905449 A	19900306	US19890310771	19890214

Probable Assignee: BOCA FOODS INC

Assignee(s):(std)**:** BOCA FOODS INC

Assignee(s): BOCA FOODS INC CORP OF NJ

Inventor(s):(std)**:** REISMAN HOWARD

International class (IPC 8–9)**:** B65D85/36 (Advanced/Invention); B65D85/30 (Core/Invention)

International class (IPC 1–7)**:** B65B61/00 B65D25/02

CPC: Y10S493/955 B65D85/36

European class: B65D85/36

US class: 206/44R 206/45.33 206/457 206/479 206/482 493/390 493/955 53/410 53/452

Classification Explorer

Cited documents: US4705163 A, US4452356 A, US4197940 A, US4133922 A, US412604 A, US3969992 A,

Forward Citations: EP1133925,

Abstract:
Source: US4836363A A decorative packing platter for foods has a planar member such as a cardboard plate having a central area for receiving the foods and a periphery. Receptacle tabs are formed, for example by die cutting, each tab having a proximal end attached to the platter and a distal end, the tab and the platter together defining a receptacle opening into which a decorative border strip is placed. The border strip becomes captive in the receptacle opening, defining a decorative edging or border. The tabs can be oriented outwardly or inwardly and in several shapes. A plastic sheet or other protective member can be placed between the food product and the platter and around the packing platter generally. The platter is especially useful for packing cookies.

0) US3632021A – APPARATUS FOR MAKING AND DISPENSING AERATED FOO...

80) Family number: 31037367 (US3632021A) © PatBase

Title: APPARATUS FOR MAKING AND DISPENSING AERATED FOOD PRODUCTS

Priority: BE19700745790 19700211 FR19700005101 19700213 GB19690007783 19690213 GB19690044033Q 19690905 GB19690007983 19690213 GB19690044033 19690917 US19700068103 19700831 GB19710008530 19710402 GB19690044034 19690905 GB19690050267 19691013 GB19690050266Q 19691013 GB19690050266 19690213

Family:

Publication number	Publication date	Application number	Application date
BE745790 A1	19700811	BE19700745790	19700211
DE2043283 A1	19710311	DE19702043283	19700901
DE2043283 C	19710311		00000000
DE2215659 A1	19721019	DE19722215659	19720327
DE7005753 U	19701008	DE19700005753U	19700212
FR2035380 A5	19701218	FR19700005101	19700213
FR2060721 A5	19710618	FR19700031507	19700828
GB1336681 A	19731107	GB19710008530	19710313
NL7012999 A	19710309	NL19700012999	19700902
SE362003 B	19731126	SE19700012025	19700904
US3632021 A	19720104	US19700009819	19700209
US3724417 A	19730403	US19700068103	19700831
US3760745 A	19730925		19720327

Probable Assignee: MACMANUS JOHN 143 16 22ND ROAD WHITESTONE NEW YORK EUA

Assignee(s):(std): MACMANUS J ; MACMANUS J US ; MACMANUS JOHN ; MCMANUS JOHN ; MAC MANUS J

Assignee(s): MAC MANUS J US ; MAC MANUS JOHN ; JOHN MACMANUS ; MACMANUS JOHN 143 16 22ND ROAD WHITESTONE NEW YORK ; MACMANUS JOHN 143 16 22ND ROAD WHITESTONE NEW YORK E U A ; MACMANUS JOHN 143 16 22ND ROAD WHITESTONE NEW YORK EUA

Inventor(s):(std): JOHN MACMANUS ; LE P A JACKSON ; MAC MANUS J ; MACMANUS J ; MACMANUS J US ; MACMANUS JOHN

Inventor(s): P A JACKSON LE ; PA JACKSON LE ; MAC MANUS J US

International class (IPC 8–9): A01J13/00 A21C15/00 A23G3/00 A23G3/02 A23G3/28 A23G9/28 A47J43/12 (Advanced/Invention); A01J13/00 A21C15/00 A23G3/00 A23G3/02 A23G9/04 A47J43/00 (Core/Invention)

International class (IPC 1–7): A21C1/02 A21C1/10 A21C15/00 A21C9/06 A21D13/00 A23G3/00 A23G3/28 A23G7/00 A23L1/00 A47B11/00 A47J43/04 A47J43/12 B65D35/28

CPC: A01J13/00 A23G9/28 A47J43/12 A21C15/005 A23G3/0294 A23G3/28 A23G3/34 A47J43/123

European class: A01J13/00 A21C15/00B2 A23G3/02M12 A23G3/28 A23G3/34 A23G9/28 A47J43/12 A47J43/12B2B

US class: 108/139 108/94 118/24 118/321 222/190 222/496 222/95

Classification Explorer

Cited documents: US3653340 A, US3631242 A, US3420210 A, US3339524 A, US3294289 A, US3155383 A, US2767553 A, US2708899 A, US2592224 A, US2503673 A, US2494242 A, US2193147 A, US1753549 A,

Forward Citations: WO0172137, WO0153389, US9049925, US8978918, US8763835, US8590446, US8372462, US8028645, US7456233, US7252034, US7105338, US7105338, US7021206, US6390662, US5417763, US4555990, US4292917, US3921858, US3836057, US2011143006, US2010077957, US2009283030, US2009145165, US2006183823, US2006019005, US2006013930, US2005214079, US2003232115, US2003209194, FR2806590, FR2704584, EP1267633, EP1023238, EP0626489,

DE9112632, DE29722711, DE2610012,

Abstract:
Source: US3632021A The apparatus includes a motor−driven pump having an inlet connected both to an air intake and to an unpressurized liquid product container, whereby the liquid product and air are simultaneously drawn into the pump. The pump outlet is connected to a static homogenizer which emulsifies the liquid and air mixture. The aerated product is then fed to a flexible tube having a dispensing device at its outlet end. Various dispensing devices are a forcing bag, a decorating head, or a hollow spear. Pneumatically operated means is provided for automatically discharging the aerated product from a forcing bag.

0) US6053349A – BEVERAGE CAN IDENTIFICATION APPARATUS AND METHO...

81) Family number: 12210009 (US6053349A) © PatBase

Title: BEVERAGE CAN IDENTIFICATION APPARATUS AND METHOD FOR REDUCING THE SPREAD OF DISEASE BY LIMITING THE CHANCE OF INADVERTENT DRINKING FROM AN OPEN CAN OF ANOTHER

Priority: US19960585485 19960116

Family:

Publication number	Publication date	Application number	Application date
GB2309215 A1	19970723	GB19970000852	19970116
GB2309215 B2	20000202	GB19970000852	19970116
GB9700852 A0	19970305	GB19970000852	19970116
US6053349 A	20000425	US19960585485	19960116

Probable Assignee: GRIGGS EUGENE S

Assignee(s):(std): GRIGGS EUGENE S ; GRIGGS EUGENE SCHENCK ; GRIGGS JR EUGENE S ; HAYES JOANNE

Assignee(s): JOANNE HAYES ; EUGENE SCHENCK GRIGGS

Inventor(s):(std): GRIGGS EUGENE SCHENCK ; GRIGGS JR EUGENE S ; HAYES JOANNE

Inventor(s): JOANNE HAYES ; EUGENE SCHENCK GRIGGS

International class (IPC 8–9): B65D17/34 G09F9/40 (Advanced/Invention); B65D17/28 G09F9/40 (Core/Invention)

International class (IPC 1–7): B65D17/34 G09F9/40

CPC: Y10S220/906 B65D17/16 B65D2517/0052

European class: B65D17/16 L65D517/00Y6B

US class: 116/201 116/307 116/320 215/230 220/269 220/906 40/307

Classification Explorer

Cited documents: US5492077 A, US5386795 A, US5358770 A, US5358117 A, US4729472 A, EP0065302 A1, CH345726 A, CH345726,

Forward Citations: WO16146875, WO13049313, WO07007102, WO07007102, WO07007102, WO0183308, USD672235, USD658980, US9637267, US9340368, US9278776, US9259913, US9187221, US9092999, US8708188, US8534490, US8426000, US8003182, US7987621, US7909196, US7617622, US7108469, US7108469, US7028424, US6951293, US6877607, US6868627, US6244456, US2013032604, US2011100854, US2010058630, US2009029116, US2009029085, US2006231445, US2006101680, US2006049072, US2005252917, US2005160650, US2004148827, US2004140309, US2004094550, US2003178397, US2003126731,

Abstract:
Source: US6053349A A technique for avoiding the risk of spreading communicable diseases in drinking inadvertently from another's open beverage can by applying distinctive user identification markers on the can top cover, positioned arcuately about the cover and identified by using the lever–opener also as an identification indicator through rotational alignment with and locking at a desired user's marker.

0) US4024694A – APPARATUS FOR FILLING AND ASSEMBLING CUPS AND P...

82) Family number: 1305480 (US4024694A) © PatBase

Title: Apparatus for filling and assembling cups and process therefore

Priority: US19760697675 19760618

Family:

Publication number	Publication date	Application number	Application date
AU197726247 A1	19790104	AU19770026247	19770620
AU515912 B2	19810507	AU19770026247	19770620
DE2727675 A1	19771229	DE19772727675	19770620
ES459912 A1	19780601	ES19770459912	19770618
GB1548482 A	19790718	GB19770024677	19770614
IL52268 A0	19770831	IL19770052268	19770607
IL52268 A1	19791031	IL19770052268	19770607
MX143789 A	19810715	MX19770169513	19770617
US4024694 A	19770524	US19760697675	19760618

Probable Assignee: INSTA CUP INC

Assignee(s):(std)**:** COOPER MARVIN ; FRANCO GINO ; INSTA CUP INC

Inventor(s):(std)**:** COOPER M ; COOPER MARVIN ; FRANCO G ; FRANCO GINO

Inventor(s): G FRANCO ; M COOPER ; MARVIN COOPER ; GINO FRANCO

Agent(s): REINHOLD COHN AND PARTNERS

International class (IPC 8–9)**:** B65B1/02 B65B1/12 B65B7/28 B65D81/00 B65D85/816 (Advanced/Invention); B65B1/00 B65B1/10 B65B7/28 B65D81/00 B65D85/804 (Core/Invention)

International class (IPC 1–7)**:** A23F1/12 A47J31/40 B65B1/00 B65B1/12 B65B1/42 B65B29/06 B65B3/00 B65B35/24 B65B5/04 B65B5/10 B65B7/16 B65B7/28 B65D B65G47/00 B65G47/52 B67C3/04

CPC: B65B1/02 B65B1/12 B65B7/2878 B65D85/816

European class: B65B1/02 B65B1/12 B65B7/28F4 B65D81/00B5 B65D85/816

US class: 53/131.3 53/173 53/282

Classification Explorer

Cited documents: US3851445 A, US3293823 A,

Forward Citations: WO8807472, WO05090170, WO05090170, WO0110719, US9428329, US7614205, US6526724, US6251450, US6230474, US5941055, US5907944, US4751806, US4188768, US4151698, US2015056341, US2012233967, US2010133127, US2009258115, US2009092711, US2008196359, US2004005385, TWI347911, GR1006541, EP0259020, EP0259020, EP0124952, DE2953433, CN104003001, CN104003001, CN102658882,

Abstract:
Source: US4024694A Apparatus for filling and assembling single serving beverage cups in which single serving beverage concentrate containers as sequentially filled from at least two and in some cases three separate beverage concentrate supply means with predetermined exactly metered quantities of beverage concentrate, and are then sealed and in which the containers are then transferred from one conveyor to another and are inserted into single serving beverage cups, on the second conveyor, and pressed firmly into the bottom thereof to engage suitable retaining means located in the side walls of the cups.

0) US2007012755A – TWO–PIECE FOOD–SERVING APPARATUS WITH SEPARABLE...

83) Family number: 34105850 (US2007012755A) © PatBase

Title:	TWO–PIECE FOOD–SERVING APPARATUS WITH SEPARABLE AND OPTIONALLY RE–ATTACHABLE HINGE
Priority:	US20050183074 20050718

Family:

Publication number	Publication date	Application number	Application date
US2007012755 AA	20070118	US20050183074	20050718

Probable Assignee:	METCALF DARRELL J
Assignee(s):(std)**:**	METCALF DARRELL J
Inventor(s):(std)**:**	METCALF DARRELL J
Inventor(s):	METCALF DARRELL JAY ; METCALF DARRELL
Agent(s):	DARRELL JAY METCALF
International class (IPC 8–9):	B65D43/08 B65D5/00 (Advanced/Invention); B65D43/08 B65D5/00 (Core/Invention)
CPC:	A47G21/001 B65D5/2028 B65D5/6697 B65D85/36 B65D2585/366
European class:	A47G21/00B B65D5/20C2 B65D5/66F B65D85/36 L65D585/36Y1
US class:	229/114 229/125.19 229/125.29
Classification Explorer	
Cited documents:	US6698928 BB, US6299918 BA, US5839652 A, US5669552 A, US5332147 A, US5181649 A, US4856707 A, US4313542 A, US4286006 A,
Forward Citations:	WO13048894, USD698613, USD697375, US9193510, US2015210443,

Abstract:
Source: US2007012755A The present invention is a separable two–piece food–serving apparatus with a quick–fit releasable and re–attachable hinge, comprised of an upper carton lid which is rotatably positionable over a lower carton food–serving tray to form a food–enclosing container. The tray has a bottom wall sized, shaped and having sufficient rigidity to be self–supporting when accommodating the weight, shape and typical bottom area of one or more food–items. The bottom wall has one or more adjoining tray side wall extending upward therefrom in a manner which provides a cantilevering support. Preferably the tray is made of a flexible material which accommodates a plurality of bending or flexing cycles and thereby facilitates the eating of food. The tray has hinge–portion tab(s) which, when brought into engagement with the hinge–portion aperture(s) of the lid provide a quick–fit releasable and re–attachable complete hinge. Exterior surfaces of the separable apparatus optionally display discernible content.

0) US5577365A – CARTON ENGAGING ASSEMBLY AND METHOD

84) Family number: 42123919 (US5577365A) © PatBase

Title: Carton engaging assembly and method

Priority: US19950503293 19950717 WO1996US07027 19960516

Family:

Publication number	Publication date	Application number	Application date
AU199657950 A1	19970218	AU19960057950	19960516
AU694879 B2	19980730	AU19960057950	19960516
BRPI9606467 A	19971118	BR1996PI06467	19960516
CA2198107 AA	19970220	CA19962198107	19960516
CL1996001242 A1	19970519	CL19960001242	19960716
CO4520202 A1	19971015	CO19960036566	19960711
DE69626766 D1	20030424	DE19966026766	19960516
DE69626766 T2	20030821	DE19966026766T	19960516
EP0781230 A1	19970702	EP19960914654	19960516
EP0781230 A4	20000126	EP19960914654	19960516
EP0781230 B1	20030319	EP19960914654	19960516
ES2194990 T3	20031201	ES19960914654T	19960516
IL118868 A0	19961031	IL19960118868	19960716
JP10506356 T2	19980623	JP19970506647T	19960516
KR19970703887 A	19970809	KR19960707255	19961218
MX9602739 A1	19970131	MX19960002739	19960711
NZ308342 A	19971219	NZ19960308342	19960516
US5577365 A	19961126	US19950503293	19950717
WO9703879 A1	19970206	WO1996US07027	19960516
ZA9606071 A	19970203	ZA19960006071	19960717

Probable Assignee: RIVERWOOD INT CORP

Assignee(s):(std)**:** RIVERWOOD INT CORP

Assignee(s): RIVERWOOD INT CORP ATLANTA ; RIVERWOOD INT ; GRAPHIC PACKAGING INT INC ; JPMORGAN CHASE BANK ADMINISTRATIVE AGENT AS ; RIVERWOOD INT USA INC ; REUTELER URS ; RIVERWOOD INT SOC ORGANIZADA BAJO LAS LEYES DEL ESTADO DE DELAWARE CORP ; BANK OF AMERICA NA ; BANK OF AMERICA NA ADMINISTRATIVE AGENT AS ; CHASE MANHATTAN BANK ; CHASE MANHATTAN BANK ADMINISTRATIVE AGENT AS ; CHEMICAL BANK ADMINISTRATIVE AGENT AS ; GRAPHIC PACKAGING INT

Inventor(s):(std)**:** REUTELER URS

Inventor(s): URS REUTELER

Agent(s): PHILLIPS ORMONDE FITZPATRICK; MACRAE AND CO; VILLASECA; XIMENA CASTELLANOS ABONDANO

Designated states: AT AU BE BR CA CH DE DK ES FI FR GB GR IE IT JP KR LU MC NL NO NZ PT SE

International class (IPC 8–9)**:** B31B1/14 B31F1/10 B65B11/16 B65B11/28 B65B17/02 B65B21/00 B65B21/24 B65B41/02 B65B49/00 B65B51/10 B65B7/00 B65B7/20 (Advanced/Invention); B65B3/00 B65B49/00 B65B5/00 (Advanced/Non-invention); B65B11/06 B65B17/00 B65B21/00 B65B49/00 B65B7/16 (Core/Invention)

International class (IPC 1–7)**:** B31B01/00 B31B1/14 B31F1/10 B65B B65B11/16 B65B11/28 B65B17/02 B65B21/00 B65B21/24 B65B41/02 B65B49/00 B65B51/10 B65B7/00 B65B7/20 B65D B65D05/00 B65G29/00

CPC: B65B21/24

European class: B65B21/24

US class: 493/359 493/370 493/426 53/377.2 53/377.5 53/398 53/48.6 53/48.8 53/486 53/488 53/491 533/980

Classification Explorer

Cited documents: WO9508477 A1, US5392586 A, US4970843 A, US4823536 A, US4805375 A, US4612753 A, US4563853 A, US4554778 A, US3701231 A, US3404505 A, US3254470 A, US3032945 A, US3013796 A, DE3201222 A1,

Forward Citations: WO0142089, US9573744, US9499319, US9487320, US9481501, US9346574, US9346573, US9284084, US9233769, US9205939, US9067702, US6748720, US6520316, US5979147, US5778630, US2015143780, US2012180431, US2006084560, EP1248728, EP1088756, EP1088756,

Abstract:
Source: US5577365A A carton engaging assembly for use in continuous motion packaging machines is designed to perform specific functions on a carton as it moves continuously along the path of travel through the packaging machine. The carton engaging assembly includes mechanisms for aligning the carton engaging device perpendicular to the carton's path of travel and to the carton side wall, so that the engaging device enters and exits the carton side wall along the substantially perpendicular line of travel. The carton engaging assembly is a self–contained, rotary unit which is readily interchanged with other units to facilitate engagement with various sizes and shapes of cartons. The rotational movement of the carton engaging assembly is timed with the continuous linear movement of the carton along the carton path of travel.

0) US5501335A – ED BASKET–STYLE CARRIER

85) Family number: 8635017 (US5501335A) © PatBase

Title: ed basket–style carrier

Priority: US19940310123 19940921 WO1995US10564 19950815

Family:

Publication number	Publication date	Application number	Application date
AT179380 E	19990515	AT19950930861T	19950815
AU199534085 A1	19960409	AU19950034085	19950815
AU683772 B2	19971120	AU19950034085	19950815
BRPI9506297 A	19970812	BR1995PI06297	19950815
CA2174668 AA	19960419	CA19952174668	19950815
CL1995001422 A1	19960806	CL19950001422	19950920
CO4440520 A1	19970507	CO19950042737	19950918
DE69509354 D1	19990602	DE19956009354	19950815
DE69509354 T2	19991230	DE19956009354T	19950815
EP0735977 A1	19961009	EP19950930861	19950815
EP0735977 A4	19970226	EP19950930861	19950815
EP0735977 B1	19990428	EP19950930861	19950815
ES2130643 T3	19990701	ES19950930861T	19950815
FI960627 A	19960322	FI19960000627	19960212
FI960627 A0	19960212	FI19960000627	19960212
IL114222 A0	19951031	IL19950114222	19950620
JP3421049 B2	20030630	JP19960510890	19950815
JP9505795 T2	19970610	JP19960510890T	19950815
KR19960704780 A	19961009	KR19960701515	19960323
MX9504027 A1	19970531	MX19950004027	19950921
NO962046 A	19960605	NO19960002046	19960520
NO962046 A0	19960520	NO19960002046	19960520
NZ292336 A	19971219	NZ19950292336	19950815
US5501335 A	19960326	US19940310123	19940921
WO9609224 A1	19960328	WO1995US10564	19950815
ZA9507935 A	19960426	ZA19950007935	19950920

Probable Assignee: RIVERWOOD INT USA INC

Assignee(s):(std): RIVERWOOD INT CORP

Assignee(s): RIVERWOOD INTERNTIONAL CORP ; RIVERWOOD INT ; RIVERWOOD INT CORP ATLANTA GA US ; RIVERWOOD INT CORP ATLANTA ; GRAPHIC PACKAGING INT INC ; JPMORGAN CHASE BANK ADMINISTRATIVE AGENT AS ; RIVERWOOD INT USA INC ; HARRIS RANDALL L ; RIVERWOOD INT CORPORACION DEL ESTADO DE DELAWARE CORP ; BANK OF AMERICA NA ; BANK OF AMERICA NA ADMINISTRATIVE AGENT AS ; CHASE MANHATTAN BANK ADMINISTRATIVE AGENT AS ; CHEMICAL BANK ADMINISTRATIVE AGENT AS ; GRAPHIC PACKAGING INT

Inventor(s):(std): HARRIS RANDALL ; HARRIS RANDALL L ; HARRIS RANDALL LEE

Inventor(s): HARRIS RANDALL LEE POWDER SPRINGS GA 30073 US ; L HARRIS RANDALL ; RANDALL L HARRIS ; RANDALL LEE HARRIS

Agent(s): PHILLIPS ORMONDE FITZPATRICK; MACRAE AND CO; VILLASECA; XIMENA CASTELLANOS ABONDANO

Designated states: AT AU BE BR CA CH DE DK ES FI FR GB GR IE IT JP KR LI LU MC NL NO NZ PT SE

International class (IPC 8–9): B65D5/46 B65D5/48 B65D71/00 B65D71/54 B65D71/56 B65D71/68 B65D75/00 (Advanced/Invention); B65D71/00 B65D77/26 (Advanced/Non–invention);

	B65D71/00 (Core/Invention)
International class (IPC 1–7):	B65B B65D B65D71/00 B65D71/06 B65D71/12 B65D71/40 B65D71/52 B65D71/68 B65D75/00
CPC:	B65D71/0011 B65D71/0014 B65D2571/00141 B65D2571/00401 B65D2571/00493 B65D2571/00506 B65D2571/0066 B65D2571/00728 B65D2571/00783
European class:	B65D71/00B1A B65D71/00B2 L65D571/00Y1A1 L65D571/00Y3C L65D571/00Y4C L65D571/00Y4C2 L65D571/00Y6A1 L65D571/00Y7B1 L65D571/00Y7B10
US class:	206/162 206/192 206/198 206/200 206/427 229/117.24
Classification Explorer	
Cited documents:	US3955745 A, US3043492 A, US2864531 A, US2742182 A, US2559374 A, US2383183 A, US2345746 A, US2326315 A, US2320315 A, US2162235 A,
Forward Citations:	WO9954225, US9359093, US9321553, US9315288, US9248933, US9073658, US8925720, US8469184, US8464866, US8353398, US8061585, US7617969, US7237671, US5871090, US2011226845, US2010270367, US2010078337, US2009250357, US2009127147, US2008290149, US2008179385, US2007000980, US2005086910,

Abstract:
Source: US5501335A A basket−style carrier which exposes major portions of packaged articles to view. Short inwardly tapered side panels are connected by integral flexible bands which encircle the end articles in the carrier. A handle may connect opposite flexible bands or may be incorporated in a handle panel extending up through an opening in the bottom panel of the carrier. A transverse base panel connected to the handle panel contacts the bottom panel in face−to−face relationship.

0) US3684861A – ELECTRIC TOASTER CONTROL

86) Family number: 1018448 (US3684861A) © PatBase

Title: ELECTRIC TOASTER CONTROL

Priority: US19710165204 19710722

Family:

Publication number	Publication date	Application number	Application date
CA941429 A1	19740205	CA19720144497	19720613
DE2235016 A1	19730201	DE19722235016	19720717
GB1392457 A	19750430	GB19720032894	19720713
GB1392459 A	19750430	GB19740040355	19720713
GB1392460 A	19750430	GB19740040671	19720713
JP55034329 B4	19800905	JP19720073755	19720722
JP55160230 A2	19801213	JP19800026082	19800229
JP55160239 A2	19801213	JP19800026083	19800229
US3684861 A	19720815	US19710165204	19710722

Probable Assignee: GEN ELECTRIC

Assignee(s):(std)**:** GEN ELECTRIC

Assignee(s): GENERAL ELECTRIC CO ; GENERAL ELECTRIC COMPANY ; GENERAL ELECTRIC CO SCHENECTADY N Y V ST A ; BLACK AND DECKER INC ; DEREMER HAROLD A

Inventor(s):(std)**:** ROHARORUDO AASAA DERIMAA ; REMER HAROLD ARTHUR DE ; REMER HAROLD A DE ; DEREMER HAROLD A ; HARORUDO AASAA DERIMAA

Inventor(s): REMER HAROLD ARTHUR DE ALLENTOWN PA V ST A ; REMER HAROLD ARTHUR DE ALLENTOWN PA V ST A ; HAROLD A DE REMER ; REMER HAROLD ARTHUR DE ALLENTOWN PA

International class (IPC 8–9): A47J37/06 A47J37/08 F24C7/04 F24C7/08 (Advanced/Invention); A47J37/06 A47J37/08 F24C7/04 F24C7/08 (Core/Invention)

International class (IPC 1–7): A47J37/08 A47J37/6 F24C7/04 F24C7/08 F24C7/6 F27D11/2 H01H37/14 H01H9/26 H05B1/02 H05B3/02

CPC: A47J37/0835 F24C7/087

European class: A47J37/08B4 F24C7/08C

US class: 219/398 219/405 219/413 99/329 99/329R 99/393 99/443R

Classification Explorer

Cited documents: US3585360 A, US3560711 A, US3529534 A, US3412236 A, US3152243 A, US3119001 A, US3119000 A, US2748244 A, US2643061 A, US23600 A,

Forward Citations: WO02053000, US8101890, US6753510, US6639187, US6357343, US5901639, US5802957, US5170039, US4517452, US4456820, US4427876, US4413173, US4189632, US4178498, US4065658, US3752955, US2016338538, US2010000417, US2003197002, DE2848165, CN103349032, CN103349032,

Abstract:
Source: US3684861A An electric oven toaster with a thermostat for controlling energization of the heating elements when the oven toaster is being operated as an oven, and a timer for controlling energization of the heating elements when the oven toaster is being operated as a toaster. A push button is moved upwardly from an OFF position for increasing the temperature setting when the oven toaster is being operated as an oven and the same push button is moved downwardly from the OFF position for setting the oven toaster for toaster operation.

0) US2007110852A – SYSTEM AND METHOD FOR PACKAGING COFFEE OR TEA

87) Family number: 32067643 (US2007110852A) © PatBase

Title: SYSTEM AND METHOD FOR PACKAGING COFFEE OR TEA

Priority: US20030530921P 20031222 US20040584433 20041217 WO2004IB04211 20041217

Family:

Publication number	Publication date	Application number	Application date
CA2551041 AA	20060621	CA20042551041	20041217
EP1706332 A2	20061004	EP20040806393	20041217
JP2007519574 T2	20070719	JP20060546378T	20041217
TW200531885 A	20051001	TW20040139844	20041221
US2007110852 AA	20070517	US20040584433	20041217
WO05063594 A2	20050714	WO2004IB04211	20041217
WO05063594 A3	20051020	WO2004IB04211	20041217
WO05063594 B1	20051201	WO2004IB04211	20041217

Probable Assignee: DA VINCI ASSOCIATION FOR INVENTORS RIGHTS

Assignee(s):(std)**:** DA VINCI ASS FOR INVENTORS RIG ; GOUVERNEUR FEDOR

Assignee(s): DA VINCI ASSOCIATION FOR INVENTORS ; DA VINCI ASSOCIATION FOR INVENTORS RIGHTS ; DAVINCI ASSOCIATION FOR INVENTORS RIGHTS

Inventor(s):(std)**:** GOUVERNEUR FEDOR

Agent(s): SMART AND BIGGAR; KING AND SCHICKLI PLLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A23B7/148 A23F3/16 A23F5/36 B65B31/00 B65D77/06 B65D81/00 B65D81/20 B65D81/24 B65D85/50 B65D85/804 (Advanced/Invention); A23B7/144 (Core/Invention)

International class (IPC 1–7): B65B29/02 B65B31/00 B65D41/02 B65D77/06 B65D81/00 B65D81/20

CPC: B65B31/00 B65D59/04 B65D77/06 B65D81/2053 B65D81/2076 B65D85/8043

European class: B65B31/00 B65D59/04 B65D77/06 B65D81/00B3 B65D81/20D1 B65D81/20F1 B65D85/804B

US class: 426/106 426/106P

Classification Explorer

Cited documents: US3387553 A, US2022467 A, US1454739 A, JP62076134 U1, JP56059575 U1, JP10329808 A2, GB1277826 A, EP0368116 A1, DE9314989 U, DE9314989,

Forward Citations: WO10057818, US2016244249, US2016242456, US2016242455, EP1867585, DE102005034676,

Abstract:
Source: US2007110852A A package for packaging coffee or tea particulate includes (a) a pouch filled with particulate; and (b) a two–piece, pressurizable can comprised of a first, cup–shaped portion having an opening, and a second disk–shaped piece for covering the opening. The pouch is packaged inside the cup–shaped portion and sealed therein by the second disk–shaped portion so as to contain the pouch. Optionally, the particulate is sealed in a CO_2 environment under pressures exceeding ambient pressure. Optionally, several of such packages are packaged together in a multipurpose sleeve. The invention permits the flavor of the particulate to be dispensed discretely as consumed, thus preserving the flavor for a long as possible.

0) US2015014203A – MEDICINE CONTAINER, METHOD OF ASSEMBLING THE CO...

88) Family number: 58242733 (US2015014203A) © PatBase

Title: MEDICINE CONTAINER, METHOD OF ASSEMBLING THE CONTAINER, AND METHOD OF DISPENSING THE MEDICINE FROM THE CONTAINER

Priority: JP20150563083T 20140703 US20130842841P 20130703 US20130842900P 20130703 US20140488207F 20140416 US20140323701 20140703 US20150529984F 20150611 WO2014US45459 20140703 US20160988565 20160105

Family:

Publication number	Publication date	Application number	Application date
AU2014285088 AA	20150108	AU20140285088	20140703
BR102014016617 A2	20151124	BR20141016617	20140703
CA158622 S	20150602	CA20140158622F	20140911
CA2916887 AA	20151223	CA20142916887	20140703
CN105517917 A	20160420	CN201480048627	20140703
CN303206250 S	20150513	CN201430391525F	20141016
CO7590641 A2	20160429	CO20160019883	20160128
EP3016886 A1	20160511	EP20140819737	20140703
EP3016886 A4	20170503	EP20140819737	20140703
JP1524173 S	20150525	JP20140016909F	20140804
JP2016528931 T2	20160923	JP20150563083T	20140703
JP2017094104 A2	20170601	JP20160240917	20161213
JP6062574 B2	20170118	JP20150563083T	20140703
MX2015017955 A1	20170213	MX20150017955	20140703
SG11201600023Q A1	20160226	SG20161100023	20140703
US2015014203 AA	20150115	US20140323701	20140703
US2016367436 AA	20161222	US20160988565	20160105
US9241873 BB	20160126	US20140323701	20140703
USD731783 S1	20150616	US20140488207F	20140416
USD747091 S1	20160112	US20150529984F	20150611
WO15003158 A1	20150108	WO2014US45459	20140703

Probable Assignee: ABBVIE INC

Assignee(s):(std)**:** ABBVIE INC

Assignee(s): FINCH JOHN ; UPCHURCH GUY

Inventor(s):(std)**:** BREBAN LOPEZ ALEXANDRA C ; FINCH JOHN ; FINCH JOHN G ; GUY UPCHURCH ; JOHN FINCH ; KIM LORI K ; MEDHAL BHIMAPRASAD ; SITA LEWIS H ; UPCHURCH GUY

Inventor(s): JOHN G FINCH

Agent(s): SPRUSON AND FERGUSON; TORYS LLP; MARGARITA CASTELLANOS ABONDANO; MODIANO MICAELA NADIA; KAWAGUTI AND PARTNERS; LISA V; MICHAEL BEST AND FRIEDRICH LLP; JULIE A; HAUT JULIE ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A61J1/03 A61J7/00 A61J7/04 B31B11/00 B65D75/34 B65D75/36 B65D75/50 B65D77/04 B65D77/22 B65D83/04 (Advanced/Invention); A61J1/03 B65D83/04 (Advanced/Non–invention)

CPC: A61J1/035 A61J7/0076 B31B11/00 B31B2203/103 B65D2215/00 A61J7/0069 A61J7/04 B31B2201/88 B65D83/0463 B65D75/367 B65D77/04 B65D77/22

US class: 1/1 206/462 206/531 493/114 493/53 53/492 D3/203.2

Locarno class: 09/99 03/01 05/99

Classification Explorer

Cited documents: WO14085625 A1, WO14057967 A1, WO10015638 A1, WO05120984 A1, USRE29705 E, USD88285 S1, USD723279 S1, USD713051 S1, USD711219 S1, USD708762 S1, USD708761 S1, USD708760 S1, USD697095 S1, USD694904 S1, USD691856 S1, USD691465 S1, USD689778 S1, USD689374 S1, USD689373 S1, USD688571 S1, USD688570 S1, USD685272 S1, USD684482 S1, USD683950 S1, USD673297 S1, USD670178 S1, USD669311 S1, USD663981 S1, USD659550 S1, USD659019 S1, USD658991 S1, USD650295 S1, USD642789 S1, USD637391 S1, USD622158 S1, USD620260 S1, USD619257 S1, USD600503 S1, USD574665 S1, USD558603 S1, USD546198 S1, USD526478 S1, USD525777 S1, USD518737 S1, USD480958 S1, USD457246 S1, USD448048 S1, USD434558 S1, USD414409 S1, USD414106 S1, USD411445 S1, USD404641 S1, USD382474 S1, USD372867 S1, USD372124 S1, USD370625 S1, USD370414 S1, USD351996 S1, USD351995 S1, USD350478 S1, USD331258 S1, USD327363 S1, USD322934 S1, USD322400 S1, USD320930 S1, USD293887 S1, USD276116 S1, USD268130 S1, USD267767 S1, USD266147 S1, USD264538 S1, USD263559 S1, USD261198 S1, USD254219 S1, USD205676 S1, USD201899 S1, USD189489 S1, US8757381 BB, US8752704 BB, US8746454 BB, US8740003 BB, US8672134 BB, US8640917 BB, US8627957 BB, US8607983 BB, US8607982 BB, US8602218 BB, US8584857 BB, US8579106 BB, US8573403 BB, US8567606 BB, US8561798 BB, US8556077 BA, US8550248 BA, US8544650 BB, US8499531 BB, US8479921 BB, US8420674 BB, US8413813 BB, US8403212 BB, US8342331 BB, US8342330 BB, US8205752 BB, US8132671 BB, US7997411 BB, US7967144 BB, US7926660 BB, US7905355 BB, US7900772 BB, US7784250 BB, US7767700 BB, US7748535 BB, US7696236 BB, US7665610 BB, US7641050 BB, US7448496 BB, US7360652 BB, US7188728 BB, US7126879 BB, US7063211 BB, US6997320 BA, US6896139 BB, US6793077 BA, US6679382 BA, US6659280 BB, US6622856 BB, US6516949 BB, US6443307 BA, US6273260 BA, US6138830 A, US6082544 A, US5740717 A, US5489025 A, US5109984 A, US5109984, US5050739 A, US4838444 A, US4340141 A, US4192422 A, US4120400 A, US3921804 A, US3921804, US3305077 A, US3288281 A, US2014216977 AA, US2014216968 AA, US2014214438 AA, US2014209498 AA, US2014183095 AA, US2014171436 AA, US2014083900 AA, US2014027341 AA, US2014027340 AA, US2014001194 AA, US2013306511 AA, US2013281960 AA, US2013256183 AA, US2013233756 AA, US2013220871 AA, US2013220870 AA, US2013193029 AA, US2013008825 AA, US2012261275 AA, US2012248005 AA, US2011215022 AA, US2009301924 AA, US2009242451 AA, US2009038982 AA, US2007185615 AA, US2006163110 AA, US2003164380 AA, US2003042167 AA, US2003034271 AA, JP6426290 U, JP64026290 U, JP64026290 U, JP2003221067 A2, JP2003221067, EP1481914 A1, EP1211191 A1, CN102574626 A, CN102482019 A, CN102307796 A, CL8912013, CL8902013, CL36012012, CA120646, CA114356, AU359486 S, AU357121 S, AU348282 S, AU346153 S, AU341384 S, AU314244 S,

Forward Citations: USD772559, US2015083634,

Abstract:
Source: US2015014203A A child–resistant medication container assembly and method of dispensing the medication from the container assembly. The medication container assembly includes a blister pack with a plurality of compartments, each of which supports a medication. The container also includes a puck and a box. The blister pack compartments are aligned with openings on the puck, and the box is configured to receive and secure the puck and the blister pack such that each of the plurality of compartments is aligned with a complementary opening in the box.

0) US4233331A – METHOD OF SECURING OPENER KEY TO A CONTAINER US...

89) Family number: 1358069 (US4233331A) © PatBase

Title: METHOD OF SECURING OPENER KEY TO A CONTAINER USING ORIENTED POLYPROPYLENE FILM WITH SOLVENTLESS ACRYLIC ADHESIVE

Priority: US19780929489 19780731 US19800113205 19800118

Family:

Publication number	Publication date	Application number	Application date
AU197948736 A1	19800207	AU19790048736	19790706
AU528363 B2	19830428	AU19790048736	19790706
FR2432442 A1	19800229	FR19790019471	19790727
FR2432442 B1	19831125	FR19790019471	19790727
GB2026430 A1	19800206	GB19790020948	19790615
GB2026430 B2	19820616	GB19790020948	19790615
IT7949903 A0	19790731	IT19790049903	19790731
JP1481393 C3	19890210	JP19790094842	19790724
JP55022495 A2	19800218	JP19790094842	19790724
JP63030219 B4	19880616	JP19790094842	19790724
US4233331 A	19801111	US19780929489	19780731
US4309237 A	19820105	US19800113205	19800118

Probable Assignee: AMERICAN NATIONAL CAN CO

Assignee(s):(std): AMERICAN CAN CO

Assignee(s): AMERICAN CAN COMPANY ; AMERICAN CAN CY ; AMERICAN CAN PACKAGING INC ; AMERICAN NATIONAL CAN CO

Inventor(s):(std): LEMKE HAROLD C ; ROHOWETZ STANLEY E ; ROHOWETZ STANLEY EDW ; SUTANREE II ROOUETSUTSU ; HARORUDO SHII REMUKE

Inventor(s): STANLEY EDW ROHOWETZ ; HAROLD C LEMKE ; SUTANREE II ROOETSUTSU

Agent(s): PHILLIPS ORMONDE AND FITZPATRICK

International class (IPC 8–9): B21D51/38 B21D51/44 B65B61/18 B65D17/52 (Advanced/Invention); B65B61/18 (Advanced/Non–invention); B21D51/38 B65B61/18 B65D17/00 (Core/Invention)

International class (IPC 1–7): B21D51/00 B21D51/44 B29C27/20 B32B31/00 B65B55/02 B65B61/18 B65C9/08 B65D17/52

CPC: Y10S428/91 Y10T156/1339 Y10T428/24008 B21D51/383 Y10T156/1773

European class: B21D51/38B

US class: 156/332 156/521 156/568 156/85 156/87 426/131 426/407 428/910 428/99 53/133.3 53/156 53/412 53/425

Classification Explorer

Cited documents: US4181555 A, US3874034 A, US3716433 A, US3565738 A, US3110554 A, US305680 A, US2996177 A, US2921045 A, US2859200 A, US2847340 A, US2532166 A, US2456467 A, US2107311 A, US2027624 A,

Forward Citations: WO9217306, US8353147, US6971219, US6915829, US6808822, US6526725, US6282865, US6127024, US6098369, US5688346, US5190609, US4758300, US4722166, US4647333, US4605459, US4602977, US4584819, US4384915, US4372797, US4351679, US4331434, US4318765, US4317694, US2015111714, US2010061666, US2004167003, US2004123955, US2004007318, US2003134062, US2002098303, JP63300958, JP57055838, EP0271665, AU586922,

Abstract:
Source: US4233331A The present invention pertains to a machine and method of adhering a can opening key to a container and the article formed by such method and machine. More specifically, this invention pertains to the taping of a can opening key to a can body wall by means of a continuous motion high speed machine for applying a polymeric film carrying an adhesive on a surface thereof.

90) Family number: 2562553 (US3812273A) © PatBase

Title: METHOD FOR THE MECHANICAL PREPARATION OF INDIVIDUAL CUPS OF FILTERED COFFEE

Priority: AT19720004506 19720524 DE19712129070 19710611

Family:

Publication number	Publication date	Application number	Application date
AT340088 B	19771125	AT19720004506	19720524
AT450672 A	19770315	AT19720004506	19720524
BE784564 A1	19721002	BE19720784564	19720608
CA961455 A1	19750121	CA19720144341	19720609
CH539416 A	19730731	CH19720008048	19720531
DE2129070 A1	19721221	DE19712129070	19710611
DE2129070 B2	19740829	DE19712129070	19710611
DE2326919 A1	19731213	DE19732326919	19730524
DE2326919 B2	19771117	DE19732326919	19730524
ES403747 A1	19750501	ES19720403747	19720610
FR2140619 A1	19730119	FR19720020811	19720609
FR2140619 B1	19771223	FR19720020811	19720609
GB1397116 A	19750611	GB19720027388	19720612
IT958301 A	19731020	IT19720050803	19720610
LU65486 A	19721005		19720608
NL7207832 A	19721213	NL19720007832	19720609
US3812273 A	19740521	US19720261455	19720609
ZA7203819 A	19730530	ZA19720003819	19720605

Probable Assignee: ANACONDA ERICSSON INC A CORP OF

Assignee(s):(std)**:** JACOBS JOH AND CO ; JACOBS AND CO ; JACOBS H U CO

Assignee(s): JACOBS J AND CO ; JACOBS J AND CO DT ; ANACONDA ERICSSON INC ; ANACONDA ERICSSON INC A CORP OF ; JACOBS W J JACOBS CO JOH ; JACOBS JOH CO ; JOH JACOBS AND CO GMBH 2800 BREMEN ; JOH JACOBS AND CO ; JOH JACOBS AND CO LANGEMARCKSTRASSE 4 20 28 BREM ; JOH JACOBS AND CO GMBH ; JOH JACOBS AND CO LANGEMARCKSTRASSE 4 20 28 BREMEN ALLEMAGNE ; SCHMIDT ERNST G F H

Inventor(s):(std)**:** ERNST SCHMIDT ; SCHMIDT E ; SCHMIDT ERNST ; SCHMIDT ERNST GEORG FERDINAND ; SCHMIDT ERNST G F H

Inventor(s): E SCHMIDT ; SCHMIDT ERNST GEORG FERDINAND HEINRICH ; SCHMIDT ERNST GEORG FERDINAND HEINRICH 2800 BREMEN ; SCHMIDT ERNST 2800 BREMEN ; SCHMIDT E DT

International class (IPC 8–9): A47J31/36 A47J31/40 B65D81/00 B65D85/804 G07F13/06 (Advanced/Invention); A47J31/24 A47J31/40 B65D81/00 B65D85/804 G07F13/06 (Core/Invention)

International class (IPC 1–7): A23F1/08 A47J31/00 A47J31/10 A47J31/40 B65D77/00 B65D77/10 G07F13/06

CPC: A47J31/3628 A47J31/3633 A47J31/3642 B65D85/8043 G07F13/065

European class: A47J31/36A4B A47J31/36A4D A47J31/36A4H A47J31/40B A47J31/40B2 A47J31/40H B65D81/00B3 B65D85/804B G07F13/06B

US class: 426/115 426/433 99/295

Classification Explorer

Forward Citations: WO9820783, WO9403092, WO8602537, WO16048181, WO13169134, WO07042415, WO06053016, WO05016094, WO04004522, USD757536, USD743786, USD743252, USD708057, USD703039, USD697797, USD695111, USD694620, US9668609,

US9598230, US8820216, US8621981, US8522668, US8505440, US8491948, US8445047, US8399035, US8327754, US8291812, US8163318, US8039034, US7987768, US7981451, US7964230, US7947316, US7673559, US7552672, US7543527, US7340790, US6948420, US6849285, US6820535, US6470920, US6347651, US6289948, US6186051, US6068871, US6025000, US5897899, US5840189, US5134924, US4920870, US4886674, US4873915, US4846052, US4818544, US4738378, US4644855, US4581239, US4534985, US4136202, US4036121, US2015132441, US2014291426, US2013180407, US2011113969, US2011100229, US2011100228, US2010107885, US2010077928, US2010034943, US2008038441, US2008028948, US2007181005, US2005241489, US2005188854, US2005183581, US2005102767, US2005016383, US2004255790, US2004237793, US2004112222, US2003077359, SG83763, JP2009361, ITVI20080301, ITGE20100014, GB2380990, GB2122881, FR2617389, FR2556323, ES2226531, EP2263501, EP1894853, EP1796518, EP1775234, EP1774878, EP1089240, EP1046366, EP1046366, EP1028068, EP1002490, EP0607159, EP0389141, EP0334572, EP0334571, EP0272922, EP0250810, EP0199953, EP0151252, DE3317211, DE3317175, CN103384487, CN103384487, CH668545, CH665340, CH664886,

Abstract:
Source: US3812273A 1397116 Beverage brewing; dispensing beverages; dispensing articles W J JACOBS [trading as JOH. JACOBS and CO] 12 June 1972 [11 June 1971] 27388/72 Headings A4E and A4T [Also in Division B8] A method of machine preparation of filtered coffee beverage, comprises: feeding a pack containing ground roast coffee to a brewing station, the ground roast coffee being disposed above a filter layer contained in the pack, the pack including a closure foil which is disposed below the filter layer when the pack is fed to the brewing station; removing the closure foil from the pack so that the pack has an open bottom; piercing a top portion of the pack; introducing hot water into the pack through the opening or openings in the pack provided by the piercing of the top portion; and collecting coffee beverage which passes through the filter layer and is discharged from the bottom of the pack. An apparatus, Fig.8, for performing the method of the invention, comprises a magazine 69 having compartments 70a, 70b, 70c for storing the packs 10. In operation a pack is conveyed by conveyers 71 and 74 to a brewing station under a water heater 45. The pack includes a closure foil 16 having a tab 19 which is clamped by a clamping device 73, as the pack is conveyed to the brewing station, to remove the closure foil. A nozzle 78 is lowered to punch a hole in the pack and hot water flows into the pack to produce filtered coffee which passes through a funnel 44 into a cup 43. The pack 10, Fig.5, includes a plastics container 15 ground roast coffee 11, a perforated aluminium foil 18, a filter paper 17, and an aluminium closure foil 16a. The closure foil may be corrugated as shown or planar as depicted in Fig.4 (not shown). The apparatus of Fig. 1 is not in accordance with the invention but various features thereof may be incorporated in a modified version of the apparatus of Fig.8. The apparatus of Fig. 1 includes magazines 12,13, 14 each containing a continuous−loop belt having compartments 22 for receiving packs 10. In operation a pack 10 is conveyed by a chute 27, 28, or 29 on to a conveyer path 31. The pack 10 is conveyed along the path 31 by pushers 34 and passes to a station 35 at which apertures are punched in the closure foil of the pack and subsequently passes to a brewing station 41. The brewing station 41 includes water control valves 47, 48, and a water heater 45. A distributer head 49 having nozzles 50 is moved downwardly in use to punch holes in the pack 10. The apparatus of Fig. 1 further includes rollers 54, 55 for crushing used packs, and a removable pack−collecting tray 56. In operation hot water is supplied in two stages by the water heater 45. The packs contained in the magazines 12, 13, 14 may include different types of ground coffee.

0) US4368379A – TOASTER HAVING TOASTING CONTROL FOR CONVENIENCE...

91) Family number: 1342096 (US4368379A) © PatBase

Title: Toaster having toasting control for convenience foods

Priority: CA19710122163 19710907 CA19730169248 19730412 US19710150544 19710607

Family:

Publication number	Publication date	Application number	Application date
AU197237949 A1	19730719	AU19720037949	19720114
AU476783 B2	19761007	AU19720037949	19720114
CA968840 A1	19750603	CA19710122163	19710907
CA972022 A1	19750729	CA19730169248	19730412
CA972022 A2	19750729	CA19730169248	19730412
GB1395536 A	19750529	GB19720026345	19720606
US4368379 A	19830111	US19710150544	19710607

Probable Assignee: SUNBEAM PRODUCTS INC

Assignee(s):(std)**:** SUNBEAM CORP

Assignee(s): SUNBEAM PRODUCTS INC ; SWANSON CHARLES E ; FIRST UNION NATIONAL BANK ADMINISTRATIVE AGENT AS

Inventor(s):(std)**:** SWANSON CHARLES E

Inventor(s): CHARLES E SWANSON

International class (IPC 8–9)**:** A47J37/08 H05B1/02 (Advanced/Invention); A47J37/08 H05B1/02 (Core/Invention)

International class (IPC 1–7)**:** A47J37/08 H05B1/02 H05B3/16

CPC: A47J37/0814

European class: A47J37/08B

US class: 219/494

Classification Explorer

Cited documents: US3585363 A, US3509321 A, US3361053 A, US2952760 A, US2806924 A, US2611849 A, US2595283 A, US2493542 A, US2271485 A,

Forward Citations: WO13086576, WO13086576, US6753510, US6546844, US2011121698, EP0261397, AU573097,

Abstract:
Source: US4368379A An electric toaster is provided which may be used for either bread slices or convenience foods. A first control lever for varying the setting of the control means of the toaster is employed to provide for light and dark toasted bread. A second control lever is employed when convenience foods are being heated to open a pair of switch contacts which reduce the power level of the toaster. The second control lever is linked to the first control lever in such a manner that the control means is adjustable over a reduced range when the power level of the toaster is reduced.

0) US4327842A – CONTAINER AND CLOSURE THEREFOR

92) Family number: 1430385 (US4327842A) © PatBase

Title: Container and closure therefor

Priority: CA19810386679 19810925 EP19810107276 19810915 US19800191227 19800926 US19800209556 19801124 US19810242756 19810311 US19810242758 19810311

Family:

Publication number	Publication date	Application number	Application date
AT12615 E	19850415	AT19810107276T	19810915
AU198175685 A1	19820401	AU19810075685	19810925
AU546097 B2	19850815	AU19810075685	19810925
BR8106169 A	19820615	BR19810006169	19810925
CA1164825 A1	19840403	CA19810386679	19810925
DE3169851 D1	19850515	DE19813169851	19810915
DK425881 A	19820327	DK19810004258	19810925
EP0048889 A1	19820407	EP19810107276	19810915
EP0048889 B1	19850410	EP19810107276	19810915
ES510420 A1	19830201	ES19810510420	19810925
ES8303229 A1	19830501	ES19810510420	19810925
GB2085853 A1	19820506	GB19810028281	19810918
GB2085853 B2	19850522	GB19810028281	19810918
GR75771 B	19840802	GR19810166081	19810917
JP57086464 A2	19820529	JP19810151913	19810925
KR830007384 A	19831019	KR19810003616	19810926
US4327842 A	19820504	US19800191227	19800926
US4328906 A	19820511	US19800209556	19801124
US4356924 A	19821102	US19810242758	19810311
US4369888 A	19830125	US19810242756	19810311
ZA8106676 A	19820929	ZA19810006676	19810925

Probable Assignee: CONTINENTAL GROUP

Assignee(s):(std)**:** CONTINENTAL GROUP ; CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL GROUP INC ; CONTINENTAL GROUP INC THE ; CONTINENTAL GROUP THE INC ; THE CONTINENTAL GROUP INC ; WALTER JOHN

Inventor(s):(std)**:** JOHN WALTER ; KERWIN JOSEPH EDWARD ; WALTER J ; WALTER JOHN ; JIYON UORUTAA

Inventor(s): JOSEPH EDWARD KERWIN

Agent(s): GRIFFITH HACK; SWABEY OGILVY RENAULT

Designated states: AT BE CH DE FR IT LU NL SE

International class (IPC 8–9)**:** B65D39/00 B65D39/16 B65D47/14 B65D51/16 (Advanced/Invention); B65D39/00 B65D47/12 B65D51/16 (Core/Invention)

International class (IPC 1–7)**:** B65D39/00 B65D39/04 B65D39/12 B65D39/16 B65D41/16 B65D47/14 B65D51/16 B65D55/02

CPC: B65D47/141

European class: B65D47/14A

US class: 215/237 220/254.3 220/254.7 220/260 220/307 220/361 220/367 220/367.1 220/375 220/832 220/834 222/543

Classification Explorer

Cited documents:

US4280636 A, US4243152 A, US4220249 A, US4171062 A, US4002516 A, US3999678 A, US3998354 A, US3949897 A, US3794207 A, US3744662 A, US3532248 A, US3469732 A, US3415412 A, US3272368 A, US3160327 A, US3080088 A, US3049264 A, US3021976 A, US3016168 A, DE2556741 B2, DE2338777 A1,

Forward Citations: WO9112181, WO12156709, WO12156709, WO08054636, WO08054636, WO08000013, WO07128810, WO07128327, WO07039367, US9655463, US9199763, US9016034, US8931656, US8833585, US8733576, US8584695, US8454292, US8371467, US8336726, US8336725, US8240498, US8205764, US8113375, US7918359, US7798346, US7757872, US7510095, US6786447, US6443508, US6431380, US6382476, US6315145, US6158603, US5984125, US5938056, US5769277, US5755360, US5660302, US5636740, US5622273, US5523236, US5217138, US5108029, US4893734, US4754898, US4747511, US4693400, US4682707, US4545508, US4533062, US4496069, US4440310, US4407423, US4362254, US2015166254, US2015122828, US2013082055, US2013049309, US2012090699, US2011233227, US2011186575, US2010294768, US2010287886, US2010116374, US2010084402, US2009179033, US2009173737, US2009173736, US2009008400, US2008169259, US2008110887, US2007262079, US2007164026, US2007068943, US2006232122, US2006102628, US2006054625, US2005145632, US2004159665, US2004000573, GB2410494, GB2300854, GB2185468, GB2116953, EP1824754, EP1767464, EP0088185, EP0072252, DE102013103727, AU588148, AU587921, AT503831,

Abstract:
Source: US4327842A A closure for a container having a neck portion, a plug which has a fluid−tight fit within the neck portion, and a manually openable pressure release valve associated with said plug operative upon being opened to release the pressure in the container and also to condition the plug for relatively easy withdrawal to open position.

0) WO16146875A1 – BEVERAGE CAN BOITE–BOISSON LATA DE BEBIDA

93) Family number: 58864512 (WO16146875A1) © PatBase

Title: BEVERAGE CAN

Priority: ES20150030312U 20150317

Family:

Publication number	Publication date	Application number	Application date
ES1137906 UA	20150326	ES20150030312U	20150317
ES1137906 Y1	20150616	ES20150030312U	20150317
WO16146875 A1	20160922	WO2016ES70171	20160315

Probable Assignee: MARZAL LAZARO ENRIQUE

Assignee(s):(std)**:** MARZAL LAZARO ENRIQUE

Assignee(s): ENRIQUE MARZAL LAZARO

Inventor(s):(std)**:** MARZAL LAZARO ENRIQUE

Inventor(s): ENRIQUE MARZAL LAZARO

Agent(s): PONS ANGEL; PONS ARINO ANGEL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A47G19/22 B65D1/12 B65D17/00 G09F3/00 (Advanced/Invention)

CPC: B65D17/165 B65D2517/0014 B65D2517/0052

Classification Explorer

Cited documents: US6476349 BA, US6244456 BA, US5492077 A, GB2309215 A1, ES1069997 UA, ES1065826 UA,

Abstract:
The invention relates to a beverage can comprising: a body (1) for containing the beverage; an aperture region (3) designed to permit the release of the beverage; a pivot (5) secured in the aperture region (3); a tab (4) rotatably secured to the pivot (5), which tab (4) can be directed as desired by a user in relation to the aperture region (3) and/or the body (1); marker projections (10) positioned in the aperture region (3) and/or on the body (1) to distinguish one can from other nearby cans, depending on which marker projection (10) the tab (4) is directed towards. This allows beverage cans to be differentiated from others, in order to prevent a user mistakenly drinking from someone else's can.

0) FR1399812A – MACHINE A IMPRIMER, NOTAMMENT LES ADRESSES PRI...

94) Family number: 21170566 (FR1399812A) © PatBase

Title: MACHINE A IMPRIMER, NOTAMMENT LES ADRESSES PRINTING MACHINE, INCLUDING ADDRESSES (Machine translation)

Priority: FR19640973943 19640511

Family:

Publication number	Publication date	Application number	Application date
FR1399812 A	19650521	FR19640973943	19640511

Inventor(s):(std): STIELOW JOHN H

International class (IPC 8–9): B41L45/00 (Advanced/Invention); B41L45/00 (Core/Invention)

International class (IPC 1–7): B41L47/06

CPC: B41L45/00

European class: B41L45/00

Classification Explorer

Abstract:
Source: FR1399812A (Claim 1) 1. Une machine a imprimer, notamment les adresses, qui utilise des cliches et comporte un magasin:de reception:et un magasin d'alimentation pour ces cliches, ces magasins etant Telles par une voie de guidage le long de laquelle les cliches circulent, cette voie de guidage comportant un curseur qui extrait les cliches un a un du magasin d'alimentation et les transfere sur ladite voie, la machine comportant egalement un piston d'impression associe a un dispositif d'encrage, et est caracterisee en ce qu'un piston d'impression elastique, qui est,deplacable verticalement, execute 'l'operation d'impression avec un support pour les cliches, lequel support est lui–meme elastique et est constitue par des glissieres de guidage.elastiques pouvant s'inflechir vers le bas sous l'action dudit piston.

Machine translation: (Claim 1) 1. A machine for printing, including addresses, which uses cliches and has a store: reception: and a food store for these cliches, these stores being such a guideway along which the cliches around, this way guide with a tab that the extract has a cliches one of the feed magazine and transfers them to said path, the machine also comprising a piston associated print has an inking unit, and is characterized in that a piston print elastic, that is, vertically displaceable, execute 'the printing operation with support for the cliches, which is supporting itself is elastic and is by slides of guidage.elastiques can bend down under the action of said piston.

0) US2007246267A – TOUCH SENSOR

95) Family number: 40747828 (US2007246267A) © PatBase

Title: TOUCH SENSOR

Priority:

CA20072648821	20070420	CA20092669446	20090618	US20060794229P	20060420
US20060793885P	20060420	EP20070761037	20070420	CA20162648821	20160726
US20070734499	20070412	US20070737727	20070419	US20070700556	20070131
US20080255358	20081021	US20110337775	20111227	US20120400541	20120220
US20120453067	20120423	US20070700566	20070131	WO2007US67116	20070420
WO2007US26066	20071219	US20120705969P	20120926	US20130758722	20130204
US20150986582	20151231	US20160069863	20160314		

Family:

Publication number	Publication date	Application number	Application date
CA2648821 AA	20081008	CA20072648821	20070420
CA2648821 C	20160816	CA20072648821	20070420
CA2669446 AA	20100421	CA20092669446	20090618
CA2669446 C	20130813	CA20092669446	20090618
CA2673737 AA	20090625	CA20072673737	20071219
CA2673737 C	20130806	CA20072673737	20071219
CA2828394 AA	20140326	CA20132828394	20130926
CA2933836 AA	20071101	CA20072933836	20070420
DE602007027496 D1	20130307	DE200760027496T	20070420
EP2013677 A2	20090114	EP20070761037	20070420
EP2013677 A4	20100526	EP20070761037	20070420
EP2013677 B1	20121219	EP20070761037	20070420
EP2573642 A2	20130327	EP20120197594	20070420
EP2573642 A3	20130710	EP20120197594	20070420
ES2401719 T3	20130423	ES20070761037T	20070420
US2007246267 AA	20071025	US20070734499	20070412
US2007246550 AA	20071025	US20070737727	20070419
US2007246564 AA	20071025	US20070700556	20070131
US2009039176 AA	20090212	US20080255358	20081021
US2012092298 AA	20120419	US20110337775	20111227
US2012145249 AA	20120614	US20120400541	20120220
US2012227849 AA	20120913	US20120453067	20120423
US2013146160 AA	20130613	US20130758722	20130204
US2016122983 AA	20160505	US20150986582	20151231
US2016195882 AA	20160707	US20160069863	20160314
US8089473 BB	20120103	US20070734499	20070412
US8118240 BB	20120221	US20070700556	20070131
US8162236 BB	20120424	US20070737727	20070419
US8243040 BB	20120814	US20110337775	20111227
US8365767 BB	20130205	US20080255358	20081021
US9228329 BB	20160105	US20120400541	20120220
US9243756 BB	20160126	US20130758722	20130204
US9285807 BB	20160315	US20120453067	20120423
WO07124311 A2	20071101	WO2007US66825	20070418
WO07124311 A3	20080502	WO2007US66825	20070418
WO07124438 A2	20071101	WO2007US67116	20070420
WO07124438 A3	20081016	WO2007US67116	20070420
WO08094247 A1	20080807	WO2007US26066	20071219

Probable Assignee: MASCO CORP

Assignee(s):(std)**:** KOOTTUNGAL PAUL D ; MARTY GARRY R ; RODENBECK ROBERT W ; SPANGLER ANTHONY G ; VEROS MICHAEL J ; MASCO CORP ; MURRAY AUSTIN RAY ; DAVIDSON KYLE ROBERT ; DELTA FAUCET CO ; JONTE PATRICK B

Assignee(s): MASCO OF INDIANA CORP ; DEVRIES ADAM M ; DAVIDSON KYLE R ; MASCO OF INDIANA INDIANAPOLIS CORP ; MARTY GARY R

Inventor(s):(std)**:** DAVIDSON KYLE R ; DAVIDSON KYLE ROBERT ; DE VRIES ADAM M ; DEVRIES ADAM M ; JONTE PATRICK B ; KOOTTUNGAL PAUL D ; MARTY GARRY R ; MARTY GARY R ; MURRAY AUSTIN RAY ; RODENBECK ROBERT W ; SPANGLER ANTHONY G ; VEROS MICHAEL J

Inventor(s): VEROS MICHAEL J INDIANAPOLIS ; SPANGLER ANTHONY G INDIANAPOLIS ; RODENBECK ROBERT W INDIANAPOLIS ; MARTY GARRY R FISHERS ; KOOTTUNGAL PAUL D INDIANAPOLIS ; JONTE PATRICK B ZIONSVILLE

Agent(s): DIMOCK STRATTON LLP; PIASETZKI NENNIGER KVAS LLP; HEENAN BLAIKIE LLP; MACRAE AND CO; FLEUCHAUS AND GALLO PARTNERSCHAFT MBB; CROSTON DAVID ET AL; CROSTON DAVID; CARVAJAL Y ISABEL; BAKER AND DANIELS LLP; DELTA FAUCET CO C O MASCO LEON E REDMAN ESQ CORP; FAEGRE BAKER DANIELS LLP; FAEGRE BAKER DANIELS; YERKESON DOUGLAS A

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A01G27/00 A62C31/02 B67D5/12 B67D7/12 E03C1/00 E03C1/02 E03C1/04 E03C1/05 E03C1/086 E03C1/18 F16K11/00 F16K21/00 F16K31/00 F16K31/02 F16K31/46 F16K37/00 F17D3/00 G05B19/04 G05D11/16 G05D23/13 G05D23/18 G05D23/185 G05D23/19 G06F3/041 G06F3/044 G08C17/02 H05K13/00 (Advanced/Invention); A62C31/02 E03C1/04 (Advanced/Non–invention); A62C31/00 B67D7/08 E03C1/02 E03C1/04 E03C1/05 E03C1/18 F16K11/00 F16K21/00 F16K31/00 F16K31/02 G05B19/04 G05D23/18 G05D23/185 G05D23/19 G06F3/041 G08C17/00 (Core/Invention)

CPC: F17D3/00 H05K13/00 Y10T137/8359 H03K17/975 E03C2001/0415 E03C1/0404 E03C1/055 G05D23/1393 A62C31/02 E03C1/057 G05D23/1353 Y10T137/0318 Y10T137/9464 Y10T29/49117 Y10T137/8158 Y10T137/8766 E03C2001/0417

European class: E03C1/04D E03C1/05D E03C1/05D2 G05D23/13B4D2B G05D23/13E H03K17/975 K62C31/02 P03C1/04K

US class: 1/1 137/1 137/1P 137/551 137/559 137/801 137/88 137/897 178/18.06 178/18.060P 178/18.060S 236/12.11 236/12.110P 239/390 239/390S 239/407 239/407S 239/447 239/569 239/569S 239/588 239/588S 239/67 239/67P 239/68 239/71 239/73 251/129.03 251/129.04 29/825 345/173 345/174 345/174P 4/623 4/668

Classification Explorer

Cited documents: WO9117377, WO8909956 A1, WO10120070, WO08094651 A1, WO08094247, WO07082301 A2, WO07059051 A2, WO06136256, WO05057086, WO04094990, WO04001142 A1, WO0120204, USRE37888 E, USRE35018 E, USD528991 S1, USD340279 S1, US8365767 BB, US8267328 BB, US8243040 BB, US8198979 BB, US8162236 BB, US8118240 BB, US8089473 BB, US7690395 BB, US7627909 BB, US75837306 P, US75683906 P, US7537195 BB, US7518381 BB, US7486280 BB, US7380731 BA, US73556905 P, US7295190 BB, US7232111 BB, US7228874 BB, US7174577 BB, US7150293 BB, US7099649 BB, US7096517 BB, US7070125 BB, US7069941 BB, US7049536 BA, US7046230 BB, US7025077 BB, US6993607 BB, US6968860 BA, US6964405 BB, US6964404 BB, US6962168 BB, US6962162 BB, US6956498 BA, US6955333 BB, US6913203 BB, US6895985 BB, US6892952 BB, US6877172 BB, US6874535 BB, US6845526 BB, US6805458 BB, US6779552 BA, US6770869 BB, US6768103 BB, US6757921 BB, US6738996 BA, US6734685 BB, US6707030 BA, US6705534 BA, US6691338 BB, US6684822 BA, US6676024 BA, US6661410 BB, US6659048 BA, US6644333 BB, US6639209 BA, US6629645 BB, US6622930 BB, US6619567 BA, US6619320 BB, US6612267 BA, US6598245 BB, US6588453 BB, US6588377 BA, US6574426 BA, US6549816 BB, US6536464 BA, US6535200 BB, US6522078 BA, US6513787 BA, US6474951 BB, US6473917 BA, US6466036 BA, US6457355 BA, US6452514 BA, US6446875 BA, US6445306 BA, US6438770 BA, US6394133 BA, US6389226 BA, US6382030 BA, US6381770 BA, US6377009 BA, US6370965 BA, US6370713 BB, US6363549 BB, US6351603 BB, US6341389 BB, US6340032 BA, US6337635 BA, US6321785 BA, US6317717 BA,

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US5634220 A, US5627375 A, US5623990 A, US5622203 A, US5610589 A, US5603344 A, US5595342 A, US5588636 A, US5586572 A, US5584316 A, US5577660 A, US5575424 A, US5572985 A, US5570869 A, US5566702 A, US5564462 A, US5555912 A, US5550753 A, US5540555 A, US5511723 A, US5511579 A, US5504950 A, US5504306 A, US5482250 A, US5479558 A, US5467967 A, US5438642 A, US5437003 A, US5433342 A, US5431302 A, US5429272 A, US5419930 A, US5409037 A, US5408578 A, US5400961 A, US5385168 A, US5362026 A, US5361215 A, US5358177 A, US5351712 A, US5348231 A, US5341839 A, US5334819 A, US5325822 A, US5323803 A, US5315719 A, US5294045 A, US5287570 A, US5277219 A, US5265318 A, US5262621 A, US5261443 A, US5257341 A, US5243717 A, US5226629 A, US5224685 A, US5224509 A, US5220488 A, US5217035 A, US5206963 A, US5205318 A, US5202666 A, US5187816 A, US5184642 A, US5183029 A, US5175892 A, US5174495 A, US5170944 A, US5170816 A, US5170514 A, US5170361 A, US5148824 A, US5143049 A, US5139044 A, US5133089 A, US5129034 A, US5125433 A, 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US4567350 A, US4563780 A, US4554688 A, US4541562 A, US4537348 A, US4532962 A, US4503575 A, US44954 A, US4459465 A, US4450829 A, US4439669 A, US4436983 A, US4429422 A, US4424767 A, US4421269 A, US4420811 A, US4410791 A, US4409694 A, US4407444 A, US4406398 A, US4406313 A, US4359186 A, US4353056 A, US4337388 A, US4331292 A, US4280530 A, US4201518 A, US4200018 A, US4185336 A, US4172381 A, US4080530 A, US3987819 A, US3799171 A, US3762440 A, US3756456 A, US3705574 A, US3685541 A, US3672479 A, US3651989 A, US3610279 A, US3588038 A, US3406941 A, US3314081 A, US32698906, US32698606, US32592706, US3254313 A, US32528406, US32512806, US32490106, US3151340 A, US3081594 A, US2991481 A, US2337321 A, US2013269786 AA, US2013239321 AA, US2012223805 AA, US2012200517 AA, US2012188179 AA, US2011187957 AA, US2010294641 AA, US2010242274 AA, US2010117660 AA, US2010096017 AA, US2010065764 AA, US2010012194 AA, US2009277508 AA, US2009119832 AA, US2009108985 AA, US2009056011 AA, US2009039176 AA, US2008271238 AA, 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US2005082503 AA, US2005055881 AA, US2005044625 AA, US2005022871 AA, US2005006402 AA, US2005001046 AA, US2004262552 AA, US2004255375 AA,

US2004231725 AA, US2004212599 AA, US2004206405 AA, US2004204779 AA, US2004195382 AA, US2004155116 AA, US2004149643 AA, US2004144866 AA, US2004135010 AA, US2004088786 AA, US2004088768 AA, US2004061685 AA, US2004041034 AA, US2004041033 AA, US2004022352 AA, US2004011399 AA, US2003234769 AA, US2003213062 AA, US2003201018 AA, US2003189108 AA, US2003185548 AA, US2003126993 AA, US2003125842 AA, US2003089399 AA, US2003088338 AA, US2003080194 AA, US2003001025 AA, US2002179723 AA, US2002148040 AA, US2002117122 AA, US2002113134 AA, US2002015024 AA, US2002007510 AA, US2001044954 AA, US2001022352 AA, US10928105, KR200382786 Y1, KR200382786, KR20030077823, KR20030008144, KR19970700266, KR1020030077823, KR1020030008144, KR1019970700266, JP73426, JP73426, JP63111383, JP2005146551 A2, JP2004092023 A2, JP2003293411, JP2003105817, JP2003020703 A2, JP2000073426, EP0961067 B1, EP0961067, DE4401637, DE3339849, DE19815324, CA2492226 AA,

Forward Citations: WO16100710, WO14149317, WO13159000, WO13154812, WO13134525, WO13134525, WO13086206, WO11146943, WO11146943, WO11146941, WO11146941, WO08042713, WO08042713, USRE45373, USD691965, US9657471, US9657466, US9657464, US9650770, US9650769, US9637895, US9632514, US9594492, US9594383, US9583838, US9559425, US9552706, US9523514, US9513019, US9506229, US9506227, US9476188, US9470336, US9464414, US9450227, US9442499, US9394675, US9379445, US9376792, US9366015, US9341278, US9340959, US9340958, US9333698, US9315976, US9310813, US9285807, US9284723, US9279239, US9273450, US9260843, US9260842, US9243756, US9243392, US9243391, US9243390, US9228329, US9194110, US9187884, US9181685, US9175458, US9164518, US9156051, US9139987, US9095860, US9074698, US9074357, US9062790, US9057184, US9057182, US9052808, US9032565, US9010377, US9009883, US8991432, US8950730, US8947305, US8944105, US8939429, US8922369, US8876012, US8844564, US8807521, US8776817, US8749523, US8723811, US8707987, US8694168, US8671979, US8614414, US8613419, US8564574, US8561626, US8534568, US8528579, US8482409, US8474788, US8469056, US8408517, US8407827, US8376313, US8375990, US8365767, US8355822, US8310456, US8267328, US8243040, US8162236, US8127782, US8118240, US8089473, US7979928, US7806141, US7690395, US2017096804, US2016362876, US2016305101, US2016208462, US2016186867, US2016146358, US2016131420, US2015368888, US2015337983, US2015336786, US2015308089, US2015308084, US2015193052, US2015159352, US2015148971, US2015040997, US2015013622, US2014246099, US2014174556, US2014159749, US2014076415, US2014069516, US2014069509, US2014042240, US2013341418, US2013340847, US2013340846, US2013248617, US2013168583, US2013104586, US2013081713, US2013067657, US2013048090, US2012312401, US2012255116, US2012227841, US2012181462, US2012168000, US2012118414, US2011295435, US2011289675, US2011203690, US2011155932, US2011155894, US2011155251, US2011139282, US2011114187, US2011088799, US2011043227, US2011016625, US2010280679, US2010206956, US2010170570, US2010101018, US2010090140, US2010065764, US2010044604, US2010012194, US2009277508, US2009237421, US2009237371, US2009073144, US2009039176, US2008203195, US2008178950, US2007246564, US2007246550, US2007246267, US2007157978, TWI443276, EP3162968, EP3023853, EP2937478, EP2754760, EP2754759, EP2669558, EP2116655, CN105143740, CN104919231, CN104344047, CN104344047, CN104271848, CN103975112, CN103975112, CN103939653, CN103939653, CN102906659, CN102844501, CN102713386,

Abstract:
Source: US2007246267A A sensor is disclosed. The sensor may be a touch sensor. The sensor may be incorporated into a water delivery system.

96) Family number: 17442836 (US4572445A) © PatBase

Title: Household appliance for treating fruit and vegetables

Priority: CA19840446749 19840203 FR19840001374 19840130 IT19830020688U 19830204 IT19830020689U 19830204

Family:

Publication number	Publication date	Application number	Application date
CA1206848 A1	19860702	CA19840446749	19840203
DE8401972 U1	19840426	DE19840001972U	19840125
FR2540372 A3	19840810	FR19840001374	19840130
FR2540372 B3	19850308	FR19840001374	19840130
FR2545712 A3	19841116	FR19840006076	19840417
FR2545712 B3	19850503	FR19840006076	19840417
GB2137714 A1	19841010	GB19840002944	19840203
GB2137714 B2	19860917	GB19840002944	19840203
GB8402944 A0	19840307	GB19840002944	19840203
IT8320688 U0	19830204	IT19830020688U	19830204
IT8320689 U0	19830204	IT19830020689U	19830204
US4572445 A	19860225	US19840577151	19840206

Probable Assignee: IPE NUOVA BIALETTI SPA

Assignee(s):(std)**:** I P E NUOVA BIALETTI IND P SPA ; I P E NUOVA BIALETTI IND PRODO ; I P E NUOVA BIALETTI S P A IND ; I P E NUOVA BIALETTI S P A INDUSTRIA PRODOTTI ELET ; IPE NUOVA BIALETTI SPA

Assignee(s): IPE NUOVA BIALETTI IND PRODOTTI ; IPE NUOVA BIALETTI SPA IND PROD ; IPE NUOVA BIALETTI INDUSTRIA PRODOTTI ELETTRODOMMS ; IPE NUOVA BIALETTI INDUSTRIA PRODOTTI ELETTRODOMESTICI SPA ; CRISTANTE GUIDO ; I P E NUOVA BIALETTI S P A INDUSTRIA PRODOTTI ELETTRODOMESTICI ; I P E NUOVA BIALETTI S P A INDUSTRIA PRODOTTI ELETTRODOMESTICI CRUSINALLO DI OMEGNA NOVARA IT ; I P E NUOVA BIALETTI SPA INDUSTRIA PRODOTTI ELETTRODOMESTICI ; I P E NUOVA BIALETTI INDUSTRIA PRODOTTI ELETTRODOMESTICI S P A ; I P E NUOVA BIALETTI S P A INDUSTRIA PRODOTTI ELETTRODOMASTICI ; I P E NUOVA BIALETTI SPA INDUSTRIA PRODOTTI ELETTR ; I P E NUOVA BIALETTI INDUSTRIA PRODOTTI ELETTRODOM

Inventor(s):(std)**:** CRISTANTE GUIDO

Inventor(s): GUIDO CRISTANTE

Agent(s): MARKS AND CLERK

International class (IPC 8–9)**:** A47J19/00 A47J19/02 A47J43/046 A47J43/07 F16P3/10 (Advanced/Invention); A47J19/00 A47J43/04 F16P3/00 (Core/Invention); A47J (Subclass/Invention)

International class (IPC 1–7)**:** A47J19/00 A47J19/02 A47J43/07 B02C18/12 F16P3/08

CPC: A47J19/027 A47J43/046 A47J43/0772 A47J2043/0744 F16P3/10

European class: A47J19/02D A47J43/046 A47J43/056C4 A47J43/07S4C F16P3/10 K47J43/07L

US class: 241/273.3 241/37.5 241/375 241/84

Classification Explorer

Cited documents: US4373677 A, US4362277 A, US4095751 A, GB2099100 A1, GB2093553 A1, GB2083882 A1, GB2082713 A1, GB2075626 A1, GB2061442 A1, GB2044332 A1, GB2038983 A1, GB2027154 A1, GB1558456 A, GB1425231 A, GB1148841 A, CH307581 A, CH307581,

Forward Citations: WO8900827, WO16058253, WO15086953, WO08062345, WO03030325, WO03030325, WO02051293, WO0174214, US9237822, US9220373, US8146490, US7530510, US6776087, US6655265, US5979806, US5445070, US5355784, US5018675,

US2016256005, US2016242587, US2011067583, US2010050886, US2008117714, US2007056450, US2006075907, US2005207273, JP5200030, JP2010509975, GB2238712, FR3014609, FR2818525, FR2618662, FR2569971, ES2127675, EP2881024, EP0638273, EP0270851, CN104433746, CN103142124, BE1007431,

Abstract:
Source: US4572445A A household appliance for squeezing, comminuting or otherwise treating fruits and vegetables comprises a motor housing with a base having a lateral extensions from which a drive shaft extends upward. A cylindrical treatment vessel fits onto that extension with a hub which surrounds the drive shaft and accommodates a tubular stub shaft of an implement to be driven, the vessel having a cover which is attachable thereto through a bayonet coupling and carries a peripheral detent which must enter a slot of the motor housing and be engaged by a retractable latch to trip a microswitch enabling the motor to operate. One implement connectable with the drive shaft comprises a centrifugal grater with an annular screen and an abrasive bottom onto which produce to be comminuted can be pressed from above by a pusher passing through a guide tube of the cover; the pusher has a hollow stem closed at its lower end and cut away laterally to form an aperture with lateral edges closely adjoining the inner screen surface of the rotating grater, the edge downstream in the direction of rotation scraping off adhering fragments such as peels or fibers which can be removed during operation by withdrawing the plunger.

0) FR1233105A – DISPOSITIF D'ENTRAINEMENT, FEUILLE PAR FEUILLE,...

97) Family number: 21472466 (FR1233105A) © PatBase

Title: DISPOSITIF D'ENTRAINEMENT, FEUILLE PAR FEUILLE, POUR L'ALIMENTATION D'UNE MACHINE A IMPRIMER DRIVE DEVICE, SHEET FOIL, FOR FOOD OF A PRINTING MACHINE (Machine translation)

Priority: FR19590793591 19590429

Family:

Publication number	Publication date	Application number	Application date
FR1233105 A	19601012	FR19590793591	19590429

Inventor(s):(std)**:** MONVOISIN JACQUES

International class (IPC 8–9): B65H9/06 (Advanced/Invention); B65H9/06 (Core/Invention)

International class (IPC 1–7): B65H9/06

CPC: B65H9/06

European class: B65H9/06

Classification Explorer

Forward Citations: DE1243698, DE1216329,

Abstract:
Source: FR1233105A (Claim 1) 1. Un dispositif d'entrainement, feuille par feuille, pour alimenter un mecanisme imprimeur ou autre, lequel dispositif comporte des rouleaux avec bandes sans fin – disposes sous un guide incline garni de caoutchouc ou autre matiere a coefficient de frottement eleve, ce guide monte elastiquement etant ecarte du plan de circulation des feuilles d'une distance inferieure a l'epaisseur de deux feuilles; a la suite de ce guide est dispose un second guide suivi immediatement d'un dispositif a echappement commande par le cylindre imprimeur, la commande etant agencee de maniere que le bord avant de chaque feuille liberee successivement par le dispositif a echappement penetre entre le cylindre imprimeur et le cylindre presseur au moment ou le debut des caracteres d'impression arrive, par la rotation du cylindre imprimeur, a l'endroit exact prevu pour le debut de l'impression de chaque feuille;

Machine translation: (Claim 1) 1. A driving device, sheet by sheet, to power a printer or other mechanism, which device has rollers with endless belts – arranged in an inclined guide lined with rubber or other matter has a high friction coefficient, the guide being mounted elastically deviates from the traffic plan leaves a distance less than the thickness of two sheets, a result of this guide has a second guide is followed immediately by an exhaust control device has the printing cylinder, the control being arranged manner that the front edge of each sheet successively liberated by the exhaust system has penetrated between the printing cylinder and the cylinder pressure at the time or the beginning of printing characters sometimes, by rotating the printing cylinder, has the exact location planned for the beginning of printing each sheet;

0) US2005247713A – TWO–PLY SEALING ELEMENT PUNCHED OUT IN A COVER ...

98) Family number: 32120189 (US2005247713A) © PatBase

Title: TWO–PLY SEALING ELEMENT PUNCHED OUT IN A COVER SHAPE

Priority: AT20040000146 20040202 EP20050450003 20050113

Family:

Publication number	Publication date	Application number	Application date
AT500163 E	20110315	AT20050450003T	20050113
AT500536 A1	20060115	AT20040000146	20040202
AT500536 B1	20060715	AT20040000146	20040202
AT500536 B8	20070215	AT20040000146	20040202
DE502005011021 D1	20110414	DE200550011021T	20050113
DK1559658 T3	20110606	DK20050450003T	20050113
EP1559658 A2	20050803	EP20050450003	20050113
EP1559658 A3	20061102	EP20050450003	20050113
EP1559658 B1	20110302	EP20050450003	20050113
ES2357842 T3	20110503	ES20050450003T	20050113
HR20110159 T1	20110430	HR20110000159	20110304
PT1559658 T	20110314	PT20050450003T	20050113
SI1559658 T1	20110630	SI20050031292T	20050113
US2005247713 AA	20051110	US20050037095	20050119
US7789262 BB	20100907	US20050037095	20050119

Probable Assignee: CONSTANTIA TEICH GMBH

Assignee(s):(std): NEKULA LAMBERT ; CONSTANTIA TEICH GMBH ; TEICH AG ; NIEDERER ANDREAS ; TEICH AKTIENGESELLSCHAFT

Assignee(s): NAUTILUS INC ; DASHAMERICA INC ; BANK OF AMERICA NA ; BANK OF AMERICA NA ADMINISTRATIVE AGENT AS

Inventor(s):(std): NIEDERER ANDREAS ; NEKULA LAMBERT

Inventor(s): ANDREAS NIEDERER ; LAMBERT NEKULA

Agent(s): DUNGLER KARIN; YOUNG AND THOMPSON

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK NL PL PT RO SE SI SK TR YU

International class (IPC 8–9): B65D41/00 B65D41/32 B65D77/10 B65D77/20 (Advanced/Invention); B65D81/34 (Advanced/Non–invention); B65D77/10 (Core/Invention); B65D81/34 (Core/Non–invention)

International class (IPC 1–7): B65D17/34 B65D77/20

CPC: B65D77/2032 B65D2577/205 B65D2577/2091 B65D2581/3437

European class: B65D77/20E1B L65D577/20M1 L65D577/20P2 L65D581/34M

US class: 220/359.2 220/359.200P 220/359.3 220/359.4 229/123.1

Classification Explorer

Cited documents: WO03009997 A1, WO0183208 A1, US6790508 BB, US6308853 BA, US6248380 BA, US6135304 A, US6056141 A, US6047443 A, US6033758 A, US5873483 A, US5342684 A, US5316603 A, US5235149 A, US5213227 A, US5197618 A, US5178293 A, US5167339 A, US5160767 A, US5141126 A, US5092469 A, US4913307 A, US4905838 A, US4858780 A, US4848931 A, US4801041 A, US4771937 A, US4735335 A, US4693390 A, US3335939 A, US2008110896 AA, US2004013827 AA, EP1340694 A2, EP0514803 A1, EP0457629 B1, EP0457629 A1, DE3706962 A1, DE20111630 U1, DE19523754 A1, DE10344546 A1,

Forward Citations:

WO12069050, WO08006123, USD675057, USD673808, USD673807, USD642463, USD642055, USD636670, USD632563, US9676513, US9663276, US9624008, US9604769, US9533805, US9440768, US9440765, US9278793, US9227755, US9221579, US9187223, US9145251, US9102438, US9028963, US8789718, US8746484, US8740052, US8733550, US2014238543, US2013240525, US2013020324, US2011315703, US2011000917, US2009311475, US2009230081, US2007235512, US2005150891, LT5932, JP2009542479, EP2909098, EP2644531, EP1842792, EP1842792, DE212008000017, CN104352131,

Abstract:
Source: US2005247713A An element which is punched out in a cover shape for sealing of containers, includes two plies with at least one opening aid which is integrated within these plies, the ply (**3**) located in the direction of the container having a plastic layer which is provided with perforations or scoring. The layers of the sealing element are cemented by a peelable adhesive layer, the opening aid and the ply which has the plastic layer being free of adhesive in the area of its perforations or scoring. The sealing element enables not only facilitated sealing of food containers, such as microwave containers, since mutual displacement or slippage of the individual plies due to the adhesive layer is prevented, but that any type of penetration of adhesive into the food container, thus into the food, is prevented in any case by the peelability of the adhesive.

0) ZA200309728A – LABEL WITH REMOVABLE PORTION FOR PRODUCT IDENTI...

99) Family number: 23175798 (ZA200309728A) © PatBase

Title: LABEL WITH REMOVABLE PORTION FOR PRODUCT IDENTIFICATION.

Priority: AU2001PR09667 20011220 AU20020347202 20021217 WO2002AU01695 20021217

Family:

Publication number	Publication date	Application number	Application date
AU2001009667 A0	20020124	AU2001PR09667	20011220
AU2002347202 AA	20030709	AU20020347202	20021217
AU2002347202 BB	20051215	AU20020347202	20021217
EP1459279 A1	20040922	EP20020782519	20021217
EP1459279 A4	20070523	EP20020782519	20021217
WO03054837 A1	20030703	WO2002AU01695	20021217
ZA200309728 A	20040929	ZA20030009728	20031215

Probable Assignee: COLLOTYPE LABELS PTY LTD

Assignee(s):(std)**:** COLLOTYPE LABELS PTY LTD ; COLLOTYPE SERVICE PTY LTD ; COLLOTYPE SERVICES PTY LTD ; FRANKHUISEN JOHN

Inventor(s):(std)**:** JOHN FRANKHUISEN ; JOHN FRANKHUIZEN ; FRANKHUIZEN JOHN ; FRANKHUISEN JOHN

Agent(s): COLLISON AND CO

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B31D1/02 G09F3/02 G09F3/10 (Advanced/Invention); B31D1/00 G09F3/02 G09F3/10 (Core/Invention)

International class (IPC 1–7): G09F3/10

CPC: B31D1/021 G09F3/02 G09F3/0288 G09F3/10

European class: B31D1/02B G09F3/02 G09F3/02C G09F3/10

Classification Explorer

Cited documents: US5329713 A, US5172936 A, GB2179910 A1, FR2706214 A1, EP0283064 A1, DE3403364 A1, DE2348595 A1, AU746344 B1, AU3622389 A1, AU2482195 A1,

Forward Citations: WO10011945, WO06048685, WO06043920, WO05049451, US9400074, US8016323, ITVR20090132, GB2407549, FR2968593,

Abstract:
A self adhesive label 42 for a bottle has a smaller portion 43 replicating information about the wine that appears on the main portion of the label. The smaller portion is defined by a perimeter of weakness with a coating 46 on the back of the smaller portion which removes adhesiveness of the self adhesive 44 on the back of that portion of the label. The smaller portion may be readily removed by the user and retained as a record of the contents of the bottle.

0) US3923198A – STRESS–OPACIFIABLE TAMPER INDICATOR

100) Family number: 1166632 (US3923198A) © PatBase

Title: Stress–opacifiable tamper indicator

Priority: AU19740073347 19740916 US19730397876 19730917 US19740499279 19740821

Family:

Publication number	Publication date	Application number	Application date
AU197473347 A1	19760318	AU19740073347	19740916
CA1020120 A1	19771101	CA19740209261	19740916
DE2444616 A1	19750430	DE19742444616	19740916
FR2243887 A1	19750411	FR19740031186	19740916
FR2243887 B1	19780224	FR19740031186	19740916
GB1471728 A	19770427	GB19740040272	19740916
IT1032082 A	19790530	IT19740053046	19740916
US3923198 A	19751202	US19740499279	19740821

Probable Assignee: MINNESOTA MINING AND MFG

Assignee(s):(std): MINNESOTA MINING AND MFG

Assignee(s): MINNESOTA MINING AND MFG CO ; MINNESOTA MINING MANUFACTURING ; MINNESOTA MINING MANUFACTURING US ; MINNESOTA MINING MFG CO ; BROCHMAN WILFRED R ; MINNESOTA MINING AND MANUFACTURING CO ; MINNESOTA MINING AND MANUFACTURING COMPANY

Inventor(s):(std): BROCHMAN WILFRED R ; BROCHMAN WILFRIED REINHOLTZ

Inventor(s): WILFRED REINHOLTZ BRUCHMAN ; WILFRIED REINHOLTZ BROCHMAN

International class (IPC 8–9): B65D17/50 B65D41/00 B65D55/08 (Advanced/Invention); B65D17/00 B65D41/00 B65D55/02 (Core/Invention)

International class (IPC 1–7): B65D17/16 B65D17/50 B65D41/00 B65D55/02 B65D55/06 B65D65/26 B65D77/20 B65D77/30 G09F3/02

CPC: B65D17/502 B65D55/0818 B65D55/0854 B65D2101/0084 B65D2517/0013 B65D2517/5035 B65D2517/5083

European class: B65D17/50A1 B65D55/08B B65D55/08B3 L65D101/00A6 L65D517/00Y2B L65D517/50M10B1 L65D517/50Q5

US class: 215/203 220/214 220/359 220/359.2 283/114 283/81 283/94 283/95

Classification Explorer

Cited documents: US3680236 A, US3516852 A, US3468744 A, US3389827 A, US3312368 A, US2790286 A,

Forward Citations: WO8403270, WO07009106, WO06027159, WO0032695, US9637264, US9221573, US8678493, US8535464, US8496291, US8292223, US8282754, US8094041, US7252569, US7178867, US6960110, US6797756, US6527900, US6301767, US6284337, US6108475, US6033519, US5798169, US5770283, US5683774, US5658411, US5641084, US5631068, US5514442, US5510171, US5477972, US5433992, US5358281, US5294470, US5261990, US5234732, US5219194, US5217790, US5199618, US5103979, US5064664, US5012946, US5004111, US4998666, US4934544, US4911302, US4905851, US4865198, US4793505, US4793504, US4793503, US4793122, US4792053, US4736857, US4709397, US4709396, US4558794, US4557505, US4519515, US4511052, US4505399, US4502605, US4489841, US4480760, US4454956, US4234099, US2009243868, US2009242695, US2009145539, US2008106127, US2007123836, US2007015422, US2006138813, US2005062319, US2004150221, US2004076721, US2003134112, JP60500524, JP1772225, EP1149134, EP0949153, EP0431240, EP0287507, EP0287507, EP0205457, EP0148030, EP0128269, EP0116892, EP0109592, EP0105971, EP0105971, DE2941381, DE2655632,

Abstract:
Source: US3923198A A container is hermetically sealed with an easy opening tape closure, at least a portion of which opacifies when stressed, providing a visual indication that the closure has been tampered with.

0) US5884783A – HOLDER FOR TACO SHELL OR THE LIKE

101) Family number: 30379678 (US5884783A) © PatBase

Title: HOLDER FOR TACO SHELL OR THE LIKE

Priority: CA19972216221 19971119 US19960756159 19961125 US19980104436 19980625 US19990266265 19990311

Family:

Publication number	Publication date	Application number	Application date
CA2216221 AA	19980525	CA19972216221	19971119
CA2216221 C	20010717	CA19972216221	19971119
US5884783 A	19990323	US19980104436	19980625
US5971168 A	19991026	US19990266265	19990311

Probable Assignee: PROULX MICHEL

Assignee(s):(std)**:** PROULX MICHEL

Inventor(s):(std)**:** PROULX MICHEL

International class (IPC 8–9)**:** A47G19/30 A47J43/00 B65D5/52 B65D81/36 (Advanced/Invention)

International class (IPC 1–7)**:** A45D19/04 A47B73/00 A47F7/00 A47J43/00 B65D5/00

CPC: Y10S229/904 Y10S229/938 B65D81/36 A47G19/30 A47G2019/306 B65D5/5293

European class: A47G19/30 B65D5/52M2 B65D81/36 K47G19/30T

US class: 211/70.1 211/73 211/85.4 229/904 229/938 248/174

Classification Explorer

Cited documents: US5518169 A, US5203493 A, US5005704 A, US4925032 A, US4896820 A, US4872566 A, US4746010 A, US4722504 A, US4671404 A, US4603825 A, US4267955 A, US4155502 A, US4105182 A, US3002722 A, US2992764 A, US2726835 A, US2524517 A, US2331038 A, US2100077 A, US2035021 A, US1172667 A, FR1234278 A, FR1047589 A,

Forward Citations: USD753440, USD741654, USD740564, USD721495, USD720539, USD715078, USD712476, USD712475, USD712251, USD711738, USD709704, USD701903, USD695987, USD693881, USD693880, USD644877, USD620752, USD538596, USD520814, US9352888, US9060633, US9051075, US8999414, US8679065, US8360384, US7731038, US7565864, US7097039, US6948625, US6273278, US6269961, US6164466, US6164461, US2014215967, US2014131427, US2013138044, US2013087664, US2010276560, US2008230672, US2008210648, US2007235399, US2007227921, US2007205171, US2007163449, US2006196803, US2006103706, US2005178697, US2005023234, US2004163992, KR101424938, CN104118612, CN102975919,

Abstract:
Source: US5884783A A holder for a taco shell or the like is formed with a taco shell receiving trough which is adapted for supporting a taco shell substantially upright. The taco shell receiving trough is defined by a narrow longitudinal support base panel having opposed longitudinal spaced−apart straight edges. An outwardly inclined rectangular side wall panel extends from each of the straight edges to form a substantially V−shaped receiving trough. A brace panel of rectangular shape extends from a straight top edge of each of the side wall panels and extends at an outward angle therefrom to a flat, surface engaging, support foot lying in a substantially common or parallel plane with the support base panel. A composite bottom connecting wall maintains the support base panel, the side wall panels, the brace panels and the support feet in a taco support position.

0) US2005025806A – SUSTAINED RELEASE PHARMACEUTICAL COMPOSITION

102) Family number: 28881224 (US2005025806A) © PatBase

Title: SUSTAINED RELEASE PHARMACEUTICAL COMPOSITION

Priority: US20020351440P 20020124 US20040895957 20040722 WO2002AU00071 20020123 US20060345364 20060202 WO2003AU00071 20030123

Family:

Publication number	Publication date	Application number	Application date
AU2003201410 AA	20030902	AU20030201410	20030123
AU2003201410 BB	20080703	AU20030201410	20030123
BRPI0307218 A	20041207	BR2003PI07218	20030123
CA2474292 AA	20040723	CA20032474292	20030123
CN1638747 A	20050713	CN20038004560	20030123
CO5601036 A2	20060131	CO20040081686	20040820
EP1478353 A1	20041124	EP20030700100	20030123
EP1478353 A4	20071017	EP20030700100	20030123
IN02179DN2004 A	20091218	IN2004DN02179	20040727
JP2005522418 T2	20050728	JP20030561579T	20030123
NZ534317 A	20060630	NZ20030534317	20030123
US2005025806 AA	20050203	US20040895957	20040722
US2006246110 AA	20061102	US20060345364	20060202
WO03061634 A1	20030731	WO2003AU00071	20030123

Probable Assignee: SMART DRUG SYSTEMS INC

Assignee(s):(std)**:** MARTINOD SERGE R ; BRANDON MALCOLM ; SMART DRUG SYSTEMS INC ; VIRBAC CORP

Assignee(s): NORTH AMERICAN NUTRITION AND AGRIBUSINESS FUND LP (CALIFORNIA PARTNERSHIP) LTD ; NORTH AMERICAN NUTRITION AND AGRIBUSINESS FUND LP CALIFORNIA PARTNERSHIP LTD ; TARAVAL ASSOCIATES SEED CAPITAL FUND LP (A CALIFORNIA PARTNERSHIP) LTD ; TARAVAL ASSOCIATES SEED CAPITAL FUND LP A CALIFORNIA PARTNERSHIP LTD ; NORTH AMERICAN NUTRITION AND AGRIBUSINESS ; NORTH AMERICAN NUTRITION AND AGRIBUSINESS FUND LP ; TARAVAL ASSOCIATES SEED CAPITAL FUND LP ; TARAVAL ASSOCIATES SEED CAPITAL FUND LP A CALIFORN ; DAVIS STEPHEN M ; GBS VENTURE PARTNERS LTD ; GBS VENTURE PARTNERS TRUSTEE FOR GBS BIO VENTURES ; GRESHAM RABO MANAGEMENT LTD ; HEWM VLG INVESTMENTS ; GRESHAM RABO MANAGEMENT TRUSTEE FOR FOOD AND AGRIB ; GBS VENTURE PARTNERS TRUSTEE FOR GBS BIO VENTURES II (AN AUSTRALIAN CORPORATION) AS LTD ; GBS VENTURE PARTNERS TRUSTEE FOR GBS BIO VENTURES II AN AUSTRALIAN CORPORATION AS LTD ; GRESHAM RABO MANAGEMENT TRUSTEE FOR FOOD AND AGRIBUSINESS INVESTMENT FUND (AN AUSTRALIAN CORPORATION) AS LTD ; GRESHAM RABO MANAGEMENT TRUSTEE FOR FOOD AND AGRIBUSINESS INVESTMENT FUND AN AUSTRALIAN CORPORATION AS LTD

Inventor(s):(std)**:** BRANDON MALCOLM ; BRANDON MALCOM ; MARTINOD SERGE R ; SEGE R MARTINOD ; MALCOLM BRANDON

Inventor(s): SERGE R MARTINOD ; MALCOM BRANDON ; MARTINOD SERGE

Agent(s): FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; HERBERT SMITH FREEHILLS; FPA PATENT ATTORNEYS PTY LTD; GOWLING LAFLEUR HENDERSON LLP; MORGAN LEWIS AND BOCKIUS LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9)**:** A61K31/00 A61K31/56 A61K38/18 A61K38/19 A61K38/22 A61K38/27 A61K38/28 A61K39/002 A61K39/02 A61K39/12 A61K39/38 A61K39/395 A61K47/02 A61K47/04 A61K47/16 A61K47/18 A61K47/26 A61K47/34 A61K47/42 A61K47/48 A61K48/00

	A61K9/00 A61K9/22 A61K9/52 A61K9/58 A61P1/04 A61P15/00 A61P19/10 A61P21/02 A61P23/00 A61P25/00 A61P3/10 A61P31/00 A61P35/00 A61P37/04 A61P43/00 A61P5/04 A61P5/32 A61P7/10 A61P9/00 (Advanced/Invention); A61K9/16 A61K9/50 (Advanced/Non–invention)
International class (IPC 1–7):	A61K31/56 A61K38/18 A61K38/19 A61K38/22 A61K38/27 A61K39/002 A61K39/02 A61K39/12 A61K39/395 A61K47/02 A61K47/04 A61K47/16 A61K47/18 A61K47/26 A61K47/34 A61K47/42 A61K47/48 A61K48/00 A61K9/00 A61K9/22 A61K9/52 A61K9/58 A61P1/04 A61P15/00 A61P19/10 A61P21/02 A61P23/00 A61P25/00 A61P3/10 A61P31/00 A61P35/00 A61P37/04 A61P43/00 A61P5/04 A61P5/32 A61P7/10 A61P9/00
CPC:	A61K9/0024 A61K9/1676 A61K9/5078 A61K31/00 A61K31/56 A61K38/27
European class:	A61K9/00M4 K61K9/16K2 K61K9/50K2
US class:	424/184.1 424/184.100S 424/234.1 424/234.100S 424/423 424/423P 424/426 424/426P 424/85.1 424/85.100S 514/11.3 514/11.300S 514/12 514/12.1 514/12.100S 514/12.2 514/12.200S 514/12.4 514/12.400S 514/13.2 514/13.200S 514/16.4 514/16.400S 514/16.6 514/16.600S 514/16.9 514/16.900S 514/169 514/169S 514/17.5 514/17.500S 514/17.7 514/17.700S 514/18.3 514/18.300S 514/19.3 514/19.300S 514/20.8 514/20.800S 514/3.3 514/3.300S 514/3.7 514/3.700S 514/4.4 514/4.400S 514/4.6 514/4.600S 514/4.8 514/4.800S 514/44 514/44.00RS 514/44R 514/6.9 514/6.900S 514/9.8 514/9.800S

Classification Explorer

Cited documents:	WO9942110 A1, WO03051335 A1, WO03002102 A1, WO0143749 A2, US6274159 BA, US6177232 BA, US5989579 A, US5851547 A, US5824049 A, US5141748 A, US5035891 A, US4957119 A, US4351337 A, US4326524 A, EP0539751 B1,
Forward Citations:	WO17025814, WO16020901, WO05117934, US8728528, US8663337, US8608049, US8602290, US8541028, US8309521, US8133553, US2011217366, US2011091518, US2009130056, US2007178454, CN104655542,

Abstract:
Source: US2005025806A A sustained release delivery apparatus including a silicone support material formed from a methyl–vinyl siloxane polymer including a fumed silica as a reinforcing filler; a pharmaceutically active composition carried in or on the silicone support material; the pharmaceutically active composition including at least one growth and/or reproduction–associated pharmaceutical component; analogue thereof or derivative thereof; and a carrier therefor.

0) DE202014008743U1 – BEHAELTER UND FALTSTRUKTUR ZUM HERSTELLEN DESSE...

103) Family number: 58691266 (DE202014008743U1) © PatBase

Title: BEHAELTER UND FALTSTRUKTUR ZUM HERSTELLEN DESSELBEN CASES AND folding structure FOR PRODUCING THE SAME (Machine translation)

Priority: DE201420008743U 20141104

Family:

Publication number	Publication date	Application number	Application date
DE202014008743 U1	20150319	DE201420008743U	20141104

Probable Assignee: HAMMERER MANFRED

Assignee(s):(std)**:** HAMMERER MANFRED

Assignee(s): HAMMERER

International class (IPC 8–9)**:** B65D25/20 B65D5/22 B65D85/36 (Advanced/Invention)

CPC: B65D5/22 B65D5/4229 B65D85/36 B65D2585/366

Classification Explorer

Cited documents: EP2634763 A2, EP2534763 A1,

Abstract:
Source: DE202014008743U1 Behaelter (1), insbesondere Verpackung fuer Lebensmittel, – mit zumindest einer Behaelterwand (2) zur Begrenzung eines Behaelterinnenraums (4) und – mit zumindest einem Informationstraeger (6) zur Wiedergabe von Informationen, – wobei der Informationstraeger (6) als vollwandiger Abschnitt der Behaelterwand (2) ausgebildet und werkzeugfrei entlang einer definierten Solltrennlinie (8) von zumindest einem an den Informationstraeger angrenzenden Behaelterwandabschnitt (10) trennbar ist. Cases (1), in particular packaging for foods – with at least one Behaelterwand (2) to limit a Behaelterinnenraums (4), and – at least one RECORDED MEDIA (6) for reproducing information, – the RECORDED MEDIA (6) as formed solid walled section of Behaelterwand (2) and without tools along a defined break line (8) of at least one adjacent to the Behaelterwandabschnitt RECORDED MEDIA (10) is separable.

0) GB1195136A – PACKAGING OF CRISP–TYPE SNACK FOOD PRODUCTS.

104) Family number: 715021 (GB1195136A) © PatBase

Title: Packaging of Crisp–Type Snack Food Products.

Priority: GB19680032920 19680710

Family:

Publication number	Publication date	Application number	Application date
GB1195136 A	19700617	GB19680032920	19680710

Probable Assignee: PROCTER AND GAMBLE

Assignee(s):(std)**:** PROCTER AND GAMBLE

Assignee(s): THE PROCTER AND GAMBLE COMPANY

Inventor(s):(std)**:** BAUR FREDRIC JOHN ; HAWLEY HAROLD KENNETH

Inventor(s): FREDRIC JOHN BAUR ; HAROLD KENNETH HAWLEY

International class (IPC 8–9): B65B23/00 B65D25/16 (Advanced/Invention); B65B23/00 B65D25/14 (Core/Invention)

CPC: B65D15/06 B65D25/16

European class: B65D15/06 B65D25/16

Classification Explorer

Forward Citations: USRE31819, US9309013, US5193440,

Abstract:
Source: GB1195136A 1,195,136. Packaging crisp–type food products; tubular containers; laminated labels. PROCTER and GAMBLE CO. 10 July, 1968, No. 32920/68. Headings B8C, B8D and B8F. A package of crisp–type food products, e.g. potato crisps, which is impervious to water vapour and oxygen comprises at least one stack of uniformly sized and uniformly non–planar crisps 15 in a tubular container 10 having at least one open end which is (or are) closed by crimping on a plastics or metal cover 13 which may have a pull tab and a scoreline to define an opening strip. A second plastics cover 17 is used to reclose the package after opening. The package may be filled with an inert gas, nitrogen or carbon dioxide. The container walls 11 may be of tin–coated steel, polyethylene, polypropylene or a kraft board–aluminium foil–plastics laminate and a corrugated glassine sleeve 16 may be used to prevent undue buffeting of the crisps on the sidewalls. When of metal or plastics the sidewalls may be formed integrally with one of the covers 13. The container may have a printed label attached made from a laminate of kraft paper, adhesive and aluminium foil.

0) US2015108152A – UNIVERSAL HANDLE FOR BEVERAGE CUP OR CONTAINER ...

105) Family number: 59062031 (US2015108152A) © PatBase

Title: UNIVERSAL HANDLE FOR BEVERAGE CUP OR CONTAINER

Priority: US20130894672P 20131023 US20140522391 20141023

Family:

Publication number	Publication date	Application number	Application date
US2015108152 AA	20150423	US20140522391	20141023

Probable Assignee: FRANZEN BRIAN

Assignee(s):(std)**:** FRANZEN BRIAN ; REDFERN RON

Inventor(s):(std)**:** FRANZEN BRIAN ; REDFERN RON

International class (IPC 8–9)**:** B65D25/28 (Advanced/Invention)

CPC: B65D25/2817 B65D69/00

US class: 220/758

Classification Explorer

Cited documents: USD693649 S1, USD502056 S1, US8561834 BB, US8364542 BB, US7581704 BA, US7527310 BB, US7080753 BA, US6520366 BA, US6360913 BA, US5816631 A, US5788298 A, US5655805 A, US5613720 A, US5219419 A, US2801743 A, US2013111688 AA, US2012074155 AA,

Abstract:
Source: US2015108152A A universal handle for beverage cups or containers is provided. The universal handle can be easily stacked in vertical alignment for storage or display, and can also be stacked out of vertical alignment to allow an end user to carry multiple beverage cups or containers in one hand. Embodiments of the universal handle include surfaces suitable for ornamentation, decoration, branding, marketing, or advertising.

0) EP2308757B1 – METHOD FOR PRODUCING PACKAGING AND PACKAGING FO...

106) Family number: 48716432 (EP2308757B1) © PatBase

Title: Method for producing packaging and packaging for conserving foods

Priority: EP20090012660 20091007

Family:

Publication number	Publication date	Application number	Application date
DE502009005628 D1	20130207	DE200950005628T	20091007
DK2308757 T3	20130318	DK20090012660T	20091007
EP2308757 A1	20110413	EP20090012660	20091007
EP2308757 B1	20121212	EP20090012660	20091007

Probable Assignee: SUEDPACK VERPACKUNGEN GMBH AND CO KG

Assignee(s):(std)**:** SUEDPACK VERPACKUNGEN GMBH AND CO KG

Inventor(s):(std)**:** GRIMBACHER CAROLIN ; SCHEURELL SEBASTIAN

Agent(s): ENGELHARDT AND ENGELHARDT PATENTANWAELTE; ENGELHARDT VOLKER

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

International class (IPC 8–9)**:** B65B19/34 B65B25/22 B65B29/08 B65B5/02 B65B61/02 B65D75/58 B65D81/32 B65D81/34 (Advanced/Invention)

CPC: B65B29/08 B65B5/022 B65B5/067 B65B19/34 B65B25/22 B65B31/04 B65B61/02 B65D75/008 B65D75/5805 B65D75/5855 B65D77/04 B65D81/2084 B65D81/3415

European class: B65B19/34 B65B25/22 B65B29/08 B65B5/02B B65B61/02 B65D75/00E B65D75/58B B65D75/58F B65D77/04 B65D81/20F2 B65D81/34B L65B31/04 L65B5/06S

Classification Explorer

Cited documents: US4784864 A, FR2788039 A1, EP1245504 A1,

DE202006020171 U1

Abstract:
The method involves folding a film web (3a) on two parallel or perpendicular pages using a fixed or peelable seal (8,9). The bag or pouch (11) is welded, and the food (2) is filled in the bag or pouch. An independent claim is also included for a bag with a laminates.

0) WO16055798A1 – MAIL PACKAGING FOR FOOD EMBALLAGE D'EXPEDITION...

107) Family number: 57984760 (WO16055798A1) © PatBase

Title: MAIL PACKAGING FOR FOOD

Priority: GB20140017835 20141008 GB20140019757 20141106 GB20140021612 20141204 GB20150011072 20150623

Family:

Publication number	Publication date	Application number	Application date
GB201417835 A0	20141119	GB20140017835	20141008
GB201419757 A0	20141224	GB20140019757	20141106
GB201421612 A0	20150121	GB20140021612	20141204
GB201511072 A0	20150805	GB20150011072	20150623
GB2531046 A1	20160413	GB20140017835	20141008
GB2531046 B2	20170607	GB20140017835	20141008
WO16055798 A1	20160414	WO2015GB52951	20151008

Probable Assignee: TEND LTD

Assignee(s):(std)**:** TEND LTD

Inventor(s):(std)**:** COULTER IAN ; DAVID WAIGHT ; IAN COULTER ; WAIGHT DAVID

Agent(s): HGF LTD

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D5/00 B65D5/42 B65D5/48 B65D5/49 B65D5/50 B65D5/66 (Advanced/Invention)

CPC: B65D5/6655 B65D5/0015 B65D5/4204 B65D5/4237 B65D5/48024 B65D5/5016 B65D5/48 B65D5/441

Classification Explorer

Cited documents: WO9102683 A1, US6471121 BA, US5516034 A, US3102674 A, US2955733 A, US2875942 A, US2296556 A, US2083623 A, US2014263594 AA, US2010314435 AA, KR20100006272 A, JP63107982 A2, GB690032 A, GB625044 A, FR82345 E, FR2502120 A1, FR1588574 A, FR1376502 A,

Abstract:
A packaging box (100) for mailing fruit and vegetables for delivery to the home comprises a box body (114) configured to receive the fruit or vegetables, a lid (102) configured to close the box body to provide a closed box, and at least one partitioning member (106) configured to divide the box body into at least two compartments. The partitioning member (106) is configured for attachment to the lid (102), whereby to connect the lid (102) to the box body (114) when the box is closed.

0) JP2001063773A – CONTAINER FOR INSTANT FOOD OR THE LIKE

108) Family number: 12040546 (JP2001063773A) © PatBase

Title: CONTAINER FOR INSTANT FOOD OR THE LIKE

Priority: JP19990113623 19990421 JP19990119336 19990427 JP19990240968 19990827 JP19990241726 19990827

Family:

Publication number	Publication date	Application number	Application date
CN1167588 C	20040922	CN20001006979	20000421
CN1272449 A	20001108	CN20001006979	20000421
HK1031111 A1	20050324	HK20010102004	20010320
JP2000302174 A2	20001031	JP19990113623	19990421
JP2000309382 A2	20001107	JP19990119336	19990427
JP2001063772 A2	20010313	JP19990240968	19990827
JP2001063773 A2	20010313	JP19990241726	19990827
JP4125839 B2	20080730	JP19990119336	19990427
JP4179712 B2	20081112	JP19990241726	19990827
JP4225646 B2	20090218	JP19990240968	19990827
JP4231150 B2	20090225	JP19990113623	19990421

Probable Assignee: DAINIPPON PRINTING CO LTD

Assignee(s):(std): NISSIN FOOD PRODUCTS CO LTD ; NISSIN FOOD PRODUCTS LTD ; DAINIPPON PRINTING CO LTD ; NISSHIN FOOD CO LTD

Assignee(s): NISSIN FOOD PROD CO LTD ; DAI NIPPON PRINTING CO LTD ; NISSIN SHOKUHIN KK ; NISSIN SHOKUHIN KABUSHIKI KAISHA

Inventor(s):(std): AGEO KENJI ; GOTAKA HAMADA ; HAMADA TAKETAKA ; HAMADA YOSHITAKA ; IKEDA KYUTARO ; KANEMURA YUKIMICHI ; KANEMURA YUKINORI ; MASAKI HIDIHIKO ; MAZAKI HIDEHIKO ; NOBORIO KENJI ; TANPO MASAHIRO ; KYUTARO IKETA ; YUKITOMO KANAMURA

Inventor(s): MASAHIRO TANPO ; YOSHITAKA HAMADA ; YUKINORI KANEMURA ; KENJI NOBORIO ; KYUTARO IKEDA ; IKETA KYUTARO ; KANAMURA YUKITOMO ; HIDIHIKO MASAKI ; HAMADA GOTAKA

International class (IPC 8–9): A45C11/20 B65D53/00 B65D77/20 B65D81/34 B65D85/804 B65D85/816 (Advanced/Invention); A45C11/20 B65D53/00 B65D77/10 B65D81/34 B65D85/804 (Core/Invention); B65D (Subclass/Invention)

International class (IPC 1–7): A45C11/20 B65D B65D53/00 B65D77/20 B65D81/34 B65D85/804 B65D85/816

Classification Explorer

Forward Citations: JP2013001426, JP2009263010, JP2007204082, JP2003104425, JP2002160758, CN101966897,

Abstract:
Source: JP2001063773A PROBLEM TO BE SOLVED: To easily, rapidly, securely, and safely discharge hot water after dipping of an instant food into hot water by forming a plurality of dripping mounts in a single motion by forming a half−cut for shaping the dripping mouths of hot water from both obverse and reverse of the cover material. SOLUTION: Half−cuts 6", 7" for forming two roughly U−shaped dripping mouths of hot water formed of half−cuts 6, 7 for shaping incisions provided from the rear face side and decoration halfcuts 6', 7' provided from the front surface side are formed in a cover material 10. Two roughly U−shaped dripping mouths of hot water can be formed in the cover material 10 in cooperation of cutting edges 5, 5 provided in the vicinity of the root of a first picking tongue piece 3, a square bracket−shaped cut line 9 provided in the first picking tongue piece 3, guiding rear half−cuts 61, 62, 71, 72 and guiding front half−cuts 61', 62', 71', 72' with half cuts 6", 7" for forming dripping mouths of hot water, by picking the first picking tongue piece 3 provided in the cover material 10 and turning it up.

0) FR1282964A – RECIPIENT FLEXIBLE FLEXIBLE CONTAINER (MACHI...

109) Family number: 21471568 (FR1282964A) © PatBase

Title: RECIPIENT FLEXIBLE FLEXIBLE CONTAINER (Machine translation)

Priority: FR19610854662 19610306

Family:

Publication number	Publication date	Application number	Application date
FR1282964 A	19620127	FR19610854662	19610306

Probable Assignee: PROTECTIVE PACKAGING DEV LTD

Assignee(s):(std)**:** PROTECTIVE PACKAGING DEV LTD

International class (IPC 8–9)**:** B31B29/00 B65D33/20 (Advanced/Invention); B31B29/00 B65D33/18 (Core/Invention)

CPC: B65D33/20 B31B2221/20

European class: B31B29/00 B65D33/20 L31B221/20

Classification Explorer

Forward Citations: US6267505, EP1026095, EP1026095,

Abstract:
Source: FR1282964A (Claim 1) 1. **ATTENTION** debut du champ CLMS peut contenir fin de DESC **. La figure 8 des dessins illustre un procede de fabrication de recipient suivant lequel deux bandes de matiere flexible, 41 et 42, se deroulent de devidoirs 43 et 44, contournent des rouleaux de guidage 45, 46 et 47, la bande 41 franchissant les rouleaux 45 et 47 et la bande 42, seulement le rouleau 46. Les bandes 41 et 42 s'inserent alors ensemble entre deux rouleaux 48 et 49. En franchissant les rouleaux –18 et 49 la bande 41 entre en contact adherent avec l'un des bords d'un ruban adhesif adherant par pression, 51, dont l'un des bords est rabattu vers l'interieur, comme decrit a propos des figures 1 et

Machine translation: (Claim 1) 1. CAUTION ** ** start of CLMS field may contain end of DESC **. Figure 8 of the drawings illustrates a manufacturing process of container in which two strips of flexible material, 41 and 42, are conducted in Reels 43 and 44, bypass guide rollers 45, 46 and 47, band 41 crossing the rollers 45 and 47 and band 42, only the roller 46. The strips 41 and 42 are inserted between two rollers while all 48 and 49. By crossing the rollers 49 –18 and 41 band adherent contacts with one edge of a pressure sensitive adhesive tape, 51, of which one edge is folded inwards, as described in connexion with Figures 1 and

0) GB1499206A – PROCESS FOR CAPPING VESSELS

110) Family number: 1174868 (GB1499206A) © PatBase

Title: PROCESS FOR CAPPING VESSELS

Priority: JP19740033905 19740328

Family:

Publication number	Publication date	Application number	Application date
AU197579361 A1	19760923	AU19750079361	19750321
DE2512882 A1	19751009	DE19752512882	19750324
DE2512882 B2	19780518	DE19752512882	19750324
DE2512882 C3	19790201	DE19752512882	19750324
FI750910 A	19750929	FI19750000910	19750326
FR2265617 A1	19751024	FR19750009227	19750325
FR2265617 B1	19780317	FR19750009227	19750325
GB1499206 A	19780125	GB19750012143	19750324
IT1032483 A	19790530	IT19750048816	19750327
JP50133081 A2	19751021	JP19740033905	19740328
NL7503642 A	19750930	NL19750003642	19750326
NO750897 A	19750930	NO19750000897	19750317
SE7503529 A	19751127	SE19750003529D	19750326
SU623504 D	19780905	SU19752119503	19750326

Probable Assignee: SUMITOMO BAKELITE CO

Assignee(s):(std)**:** SUMITOMO BAKELITE CO

Assignee(s): SUMITOMO BAKELITE CO LTD ; SUMITOMO BAKELITE CO LTD TOKIO ; SUMITOMO BAKELITE COMPANY LIMITED ; SUMITOMO BAKELITE COMPANY LIMITED TE TOKIO ; SUMITOMO BAKELITE CY LTD ; SUMITOMO BAKELITE CY LTD JA ; SUMITOMO BEJKLAJT KOMPANI FA LTD ; SUMITOMO BEJKLAJT KOMPANI LIMITED FIRMA

Inventor(s):(std)**:** HOMMA K ; HOMMA KEISUKE ; TOKUDA K ; TOKUDA KOICHI ; KHOMMA KEJSYUKE

Inventor(s): KOICHI TOKUDA ; KOICHI TOKUDA KEISUKE HOMMA ; TOKUDA KOICHI TAKARAZUKA ; KOICHI TOKUDA JA ; KEJSYUKE KHOMMA JA ; HOMMA KEISUKE ITAMI ; KEISUKE HOMMA

International class (IPC 8–9): B65B7/28 B65D41/02 (Advanced/Invention); B65D41/02 (Advanced/Non–invention); B65B7/28 B65D41/02 (Core/Invention)

International class (IPC 1–7): B29C27/20 B65B53/02 B65B7/28 B65D41/24 B65D7/16 B65D77/20 B67B3/02 B67B5/00 F16J13/02

CPC: B65B7/2885

European class: B65B7/28F5

Classification Explorer

Forward Citations: WO0208086, EP1607348, EP0096826, DE3222180, AT500384, AT500384,

Abstract:
Source: GB1499206A 1499206 Capping containers SUMITOMO BAKELITE CO Ltd 24 March 1975 [28 March 1974 10 Sept 1974] 12143/75 Heading B8C A method of capping a container 1 comprises fixing a biaxially oriented film 3 on the lip of the container 1 using a cooled pressing plate 5, bending a portion of the film which extends beyond the lip, downwards using bending members 6, and heating the extending portion to shrink the same. The film applied to the container may be punched–out before being fixed to the container by the pressing plate 5 or it may be punched out in situ on the container while it is fixed by the pressing plate 5. The whole of the capped container or only the applied cap may be subjected to a secondary heating operation. The pressing plate 5 is water cooled and may be integrally formed with the bending parts 6, Fig. 17 (not shown). The film 3 or the container may have a coating of a hot melt adhesive, such as a vinyl acetate adhesive. The film applied by the present method may constitute the sole closure for a container, as shown, or it may comprise an over cap for a closed can, Fig. 12 (not shown) or for a container closed by conventional methods, Figs. 7–10 (not shown). The

container may include an outwardly directed lip (2) Fig. 3 (not shown) or one or more outwardly directed projections (9) Fig. 11 (not shown), around which the film is shrunk. The punched out film may include a gripping tab (12) Fig. 16 (not shown). Various biaxially oriented films are disclosed and the film may also be a laminate.

0) US5516038A – PACKAGING CONTAINERS, PARTICULARLY SUITABLE FOR...

111) Family number: 28833073 (US5516038A) © PatBase

Title: Packaging containers, particularly suitable for pasta, rice, and other dry food products

Priority: IT1993FO00021 19931112 IT1994FO00002 19940218 IT1994FO00002U 19940218

Family:

Publication number	Publication date	Application number	Application date
ITFO930021 A0	19931112	IT1993FO00021	19931112
ITFO930021 A1	19950512	IT1993FO00021	19931112
ITFO940002 A0	19940218	IT1994FO00002	19940218
ITFO940002 A1	19950819	IT1994FO00002	19940218
ITFO940002 A3	19950818	IT1994FO00002	19940218
ITFO940002 U0	19940218	IT1994FO00002U	19940218
ITFO940002 U1	19950819	IT1994FO00002U	19940218
ITFO940002 U3	19950818	IT1994FO00002U	19940218
US5516038 A	19960514	US19940331841	19941031

Probable Assignee: CORTICELLA MOLINI E PASTIFICI SPA

Assignee(s):(std): CORTICELLA IND MOLINI E PASTIF ; CORTICELLA MOLINI E PASTIFICI ; CORTICELLA MOLINI E PASTIFICI S P A

Assignee(s): CORTICELLA INDUSTRIA MOLINI E PASTIFICI SPA ; CORTICELLA MOLINI E PASTIFICI SP A ; CORTICELLA MOLINI E PASTIFICI SPA ; CORTICELLA INDUSTRIA MOLINI E PASTIFICI S P A ; CORTICELLA INDUSTRIA MOLINI E PASTIFICI

Inventor(s):(std): ZACCARINI ANTONIETTA

International class (IPC 8–9): B65D5/42 B65D5/46 B65D5/72 G01F19/00 (Advanced/Invention); B65D85/22 (Advanced/Non–invention); B65D5/42 B65D5/46 B65D5/72 G01F19/00 (Core/Invention); B65D85/20 (Core/Non–invention)

International class (IPC 1–7): B65D5/42 B65D5/72

CPC: B65D5/4204 B65D5/46 B65D5/72 B65D85/22 G01F19/00 G01F19/007

European class: B65D5/42B B65D5/46 B65D5/72 G01F19/00 G01F19/00C L65D85/22

US class: 206/769 215/365 229/125.12 229/162 229/162.2 229/218 229/220 229/243 73/426

Classification Explorer

Cited documents: US5197625 A, US4846394 A, US4290523 A, US4213536 A, US3799428 A, US3530722 A, US3490678 A, US3322265 A, US3065915 A, US303422 A, US2294473 A, US2177918 A, US2153911 A, US2107613 A, GB763770 A, FR993163 A, FR1469103 A, EP0187334 A2,

Forward Citations: WO14174130, WO08091544, WO0107323, WO0028288, USD727732, USD703038, USD585709, USD582719, USD548025, USD548022, USD546638, USD543422, USD503614, USD460665, US7992476, US7882737, US7854373, US7779739, US7762169, US7306138, US7191691, US6932265, US6572904, US6568587, US6000849, US2015140162, US2013248557, US2010266995, US2009249936, US2009249935, US2009249930, US2009101698, US2008173564, US2008086102, US2007125210, US2006240152, US2006233927, US2006218799, US2006090352, US2005118302, US2005082356, US2004074956, FR2754340, EP1152227, CN104229324, AU758804, AU758804,

Abstract:
Source: US5516038A In a box which is made of cardboard or other rigid material and has a rectangular prism–like shape, one or two opposite faces have an inspection port which is closed with transparent material and is flanked by a graduated scale used to determine, according to the level reached after one or more partial removals, the weight of the short pasta or rice left in the box and any corresponding calories. The removal outlet, closed by a tear–open tab, is provided in one of the two faces that are normal to the face or faces provided with the inspection port and the graduated scale; the handle that makes it easier to grip the box protrudes on the opposite face. In the dosage container for short pasta or rice and in the dosage container for spaghetti or other long pasta, both made

of cardboard or other opaque rigid material, there are one or more inspection ports which are made of transparent material and are shaped and/or arranged so as to directly form the sequence of elevation references, proximate to which the corresponding weight of the product and optionally the number of calories are indicated.

0) US4190208A – PROCESSOR AND CUTTER DISC

112) Family number: 1751524 (US4190208A) © PatBase

Title: Processor and cutter disc

Priority: US19780955348 19781027

Family:

Publication number	Publication date	Application number	Application date
BR7906858 A	19800909	BR19790006858	19791022
DE2943187 A1	19800508	DE19792943187	19791025
FR2439648 A1	19800523	FR19790026473	19791025
GB2033733 A1	19800529	GB19790036172	19791018
IT1124670 A	19860514	IT19790026824	19791026
IT7926824 A0	19791026	IT19790026824	19791026
JP55083598 A2	19800624	JP19790137828	19791026
US4190208 A	19800226	US19780955348	19781027

Probable Assignee: GEN ELECTRIC

Assignee(s):(std)**:** GEN ELECTRIC

Assignee(s): GENERAL ELECTRIC ; GENERAL ELECTRIC CO ; GENERAL ELECTRIC CY ; BLACK AND DECKER INC ; GEC

Inventor(s):(std)**:** BIHIMU SEIN MADAN ; LOUIS SCHAEFFER ROBERT ; MADAN B ; MADAN BHIM S ; MADAN BHIM SAIN ; ROBAATO RUISU SUCHIETSUFUAA ; SAIN MADAN BHIM ; SCHAEFFER R ; SCHAEFFER ROBERT L ; SCHAEFFER ROBERT LOUIS

International class (IPC 8–9): A47J43/04 A47J43/06 B02C18/08 B26D3/22 B26D3/26 (Advanced/Invention); A47J43/04 B02C18/06 B26D3/00 B26D3/24 (Core/Invention)

International class (IPC 1–7): A47J43/00 A47J43/06 B02C18/06 B02C18/08 B02C18/18 B26D1/147 B26D1/29 B26D3/22 B26D3/26 B26D7/26

CPC: A47J43/06 B26D3/22

European class: A47J43/06 B26D3/22

US class: 241/282.2 241/92

Classification Explorer

Cited documents: US3085607 A, US3032086 A, US2678073 A, US243139 A, US1964437 A, FR2364013 A1,

Forward Citations: WO9619137, WO15040344, WO12015661, WO12004511, WO11064080, USD701087, USD679140, USD652678, USD474369, US9655474, US9439539, US9427111, US9301647, US9265381, US9049965, US8985010, US8944357, US8833683, US8777140, US8720325, US8701531, US8677895, US8671832, US8439285, US8365645, US8250959, US8122820, US7685935, US7530510, US5983769, US5473967, US5343791, US5201259, US5179881, US5174181, US4979418, US4926726, US4884755, US4458848, US4456184, US4256265, US2013270378, US2013228642, US2013118327, US2011139017, US2011049279, US2010154660, US2010154658, US2007051249, US2005207273, JP6141182, JP2013530765, JP2006198579, FR3010884, FR2817188, FR2548573, FR2500783, EP2853184, EP2382902, EP0100755, EP0100755, DE3629741, CN102958412, CN102958412, CN102639042, CN102639042, AU2011283050,

Abstract:
Source: US4190208A In a food processor with a power base and a lid–covered bowl, a feed chute through the lid empties onto a cutting disc rotated by a shaft extending into and terminating in the bowl. To this general combination an improvement in the disc structure is provided comprising a peripheral flange around the disc edge extending upwardly adjacent the bowl inner surface, with a single substantially rectangular locking bevel–edged opening through the disc and flange on one side only of the disc's center, the opening terminating short of and adjacent the disc center. A narrow slot is provided centrally of the opening to extend across the disc center and a depending hub on the disc at its center crosses the slot to receive the shaft. A removable beveled–edged cutter blade insert has a tab matching the slot and the insert is radially slidable into the opening and the slot to contact the hub. A stepped sleeve on the tab vertically locates the insert on the shaft and the insert has a scoop behind the cutter which is beveled to funnel cut food down into the bowl. The entire device is plastic with a metallic cutter

blade and the arrangement is such that the disc is totally carried by the insert which is supported by the hub/tab contact and is vertically restrained by the locked edges while being radially restrained by the shaft. The disc is further fixedly spaced from the underside of the lid by the stepped sleeve for clearance from the lid providing a single disc with multiple capabilities by using different shaped inserts.

113) Family number: 3741987 (US4762041A) © PatBase

Title: DISPENSING MECHANISM FOR SEPARATING COUPONS FROM A CONNECTED RIBBON OF COUPONS

Priority: CA19880556640 19880115 US19870017529 19870224

Family:

Publication number	Publication date	Application number	Application date
CA1279295 A1	19910122	CA19880556640	19880115
GB2201406 A1	19880901	GB19880003307	19880212
GB2201406 B2	19900228	GB19880003307	19880212
GB8803307 A0	19880309	GB19880003307	19880212
US4762041 A	19880809	US19870017529	19870224

Probable Assignee: GENERAL METHODS A CORP OF ILLINOIS CORP

Assignee(s):(std): GEN METHODS CORP

Assignee(s): GENERAL METHODS A CORP OF ILLINOIS CORP ; GENERAL METHODS CORP ; KUYKENDALL HAROLD D

Inventor(s):(std): KUYKENDALL HAROLD D

Inventor(s): HAROLD D KUYKENDALL

Agent(s): SMART AND BIGGAR

International class (IPC 8–9): B26D5/20 B65B61/20 (Advanced/Invention); B26D5/20 B65B61/20 (Core/Invention)

International class (IPC 1–7): B26D5/20 B65H17/40 B65H20/20

CPC: Y10T83/4635 Y10T83/54 Y10T83/543 Y10T83/9449 B65B61/20 B26D5/20

European class: B26D5/20 B65B61/20

US class: 226/68 83/278 83/369 83/371 83/695

Classification Explorer

Cited documents: US4405070 A, US4077289 A, US3992967 A, US3823633 A, US3578229 A, US3435717 A, US3293964 A, US3255649 A, US3174371 A, US3013740 A, US3013368 A, US2725101 A, US2049135 A, GB1578180 A,

Forward Citations: WO9941150,

Abstract:
Source: US4762041A A mechanism for feeding a ribbon having discrete three dimensional objects includes a specially formed finger which fits through a U–shaped opening from the back side of the ribbon and incrementally drives the ribbon into position where it is severed along a predetermined line by a knife which moves transverse to the direction of movement of the ribbon. The knife includes a gap in the blade opposite the U–shaped opening to avoid severing a tab associated with the U–shaped opening.

0) US4712512A – BIRD FEEDER MADE FROM A PLASTIC BOTTLE, INCLUDI...

114) Family number: 10076468 (US4712512A) © PatBase

Title: Bird feeder made from a plastic bottle, including apparatus therefor and a method of making

Priority: US19860891657 19860801

Family:

Publication number	Publication date	Application number	Application date
US4712512 A	19871215	US19860891657	19860801

Probable Assignee: SCHREIB BERNHARD

Assignee(s):(std)**:** SCHREIB BERNHARD ; SCHREIB JOHN K

Inventor(s):(std)**:** SCHREIB BERNHARD ; SCHREIB JOHN K

International class (IPC 8–9)**:** A01K39/01 (Advanced/Invention); A01K39/00 (Core/Invention)

International class (IPC 1–7)**:** A01K39/01

CPC: A01K39/01 A01K39/0113

European class: A01K39/01 A01K39/01C

US class: 119/51R 119/52.2 119/52R

Classification Explorer

Cited documents: US4570575 A, US4327669 A, US4259927 A, US3089462 A, GB2146221 A1,

Forward Citations: WO12088252, WO06130148, USD789621, USD744172, USD729989, USD727575, USD727574, USD725316, USD723226, USD720506, USD713101, USD708401, USD704386, USD698502, USD679453, USD679059, USD678627, USD677016, US9027225, US8978586, US8899179, US8857374, US8833302, US8833301, US8316800, US8272607, US8006946, US7827936, US7516716, US7273021, US7162975, US6932023, US6595158, US6439158, US6408788, US5655477, US5555843, US5423291, US5375558, US5307760, US5033411, US4974547, US4966098, US4955319, US2015122157, US2007227453, US2004216684, DE202010004849, DE102010014024, CN104621001, CN103260946,

Abstract:
Source: US4712512A A method and apparatus components for converting a plastic carbonated beverage bottle into a bird feeder. The apparatus components include pointed feeder trays for insertion into the bottle through specially formed slots cut in the sidewall of the bottle, and a decorative sleeve with corresponding cut–outs is secured around the bottle sidewall. An umbrella–like cover made from a flat piece of flexible plastic is clamped atop the bottle by the bottle closure cap of the bottle to protect the seed from rain and to prevent squirrels and the like from taking the bird seed. A piercing–and–cutting tool is provided to pierce the bottle sidewall and sleeve to create the slots for the insertion of the feeder trays and is also useful for making an opening in the bottle cap for the receipt of a support line. A reinforcing cap washer is nested interiorly of the bottle closure cap for added strength and attachment with the support line. A support hook is provided for connection to the support line and for the support of the bird feeder made by the apparatus and method steps.

115) Family number: 24108397 (JP2002302154A)

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Title: EASY–TO–UNSEAL NONMETALLIC CONTAINER AND INSTANT FOOD PUT IN THE CONTAINER

Priority: JP20010012357 20010119 JP20010020536 20010129 JP20010386268 20011219

Family:

Publication number	Publication date	Application number	Application date
JP2002302154 A2	20021015	JP20010386268	20011219
KR20020062215 A	20020725	KR20020003010	20020118

Probable Assignee: KAGAWA ATSUKO

Assignee(s):(std)**:** KAGAWA ATSUKO

Inventor(s):(std)**:** KAGAWA SEIJI ; KAGAWA YOICHIRO

International class (IPC 8–9)**:** A23L1/00 A23L1/162 A47J41/00 B65D5/70 B65D77/20 (Advanced/Invention); A47J41/00 B65D5/70 (Advanced/Non–invention); A23L1/00 A23L1/162 A47J41/00 B65D5/70 B65D77/10 (Core/Invention); A47J41/00 (Core/Non–invention)

International class (IPC 1–7)**:** A23L1/00 A23L1/162 A47J41/00 B65D5/70 B65D77/20

Classification Explorer

Forward Citations: KR100667668, JP2011189949, JP2011051590, JP2009523619, JP2008179417, JP2008155959,

Abstract:
Source: JP2002302154A PROBLEM TO BE SOLVED: To provide an easy–to–unseal nonmetallic container wherein a lid is easily torn in a strip to open and dead foldability of the lid is secured without using a metallic material such as aluminum at all in the whole container. SOLUTION: The easy–to–unseal nonmetallic container includes a nonmetallic container body 1 for receiving food and a dead–foldable lid 3 to be heat–sealed with an opening rim 11 of the body 1. The lid 3 is formed of a laminated sheet comprising (a) a polyethylene terephthalate film layer 33 uniaxially oriented in the same direction as a tearing direction, (b) a paper layer 31 for applying dead foldability, (c) a lightproof ink layer 34 printed on the paper layer 31 and (d) a sealant film layer 32 which is heat–sealable and also has innumerable fine holes uniformly. The sealant film 32 is the innermost layer. The lid 3 is formed with a tab 4 at an end of an outer periphery, and also with points 5 and 5 to start tearing on both sides of the tab 4. The tab 4 is pulled whereby the lid 3 can be easily unsealed in a strip form from the points 5 and 5, and a strip flap 8 formed by tearing is substantially kept curled.

0) DE2363449C2 – BELEGSTAPELEINRICHTUNG AN REGISTRIERKASSEN

116) Family number: 2063719 (DE2363449C2) © PatBase

Title: BELEGSTAPELEINRICHTUNG AN REGISTRIERKASSEN

Priority: DE19732363449 19731220

Family:

Publication number	Publication date	Application number	Application date
DE2363449 A1	19750619	DE19732363449	19731220
DE2363449 B1	19750619	DE19732363449	19731220
DE2363449 C2	19760212	DE19732363449	19731220

Probable Assignee: ANKER WERKE AG

Assignee(s):(std)**:** ANKER WERKE AG

Assignee(s): ANKER WERKE AG 4800 BIELEFELD ; ANKER WERKE 4800 BIELEFELD AG

Inventor(s):(std)**:** KLEY REINHARD

Inventor(s): KLEY REINHARD 4811 UBBEDISSEN

International class (IPC 8–9)**:** G06K13/12 (Advanced/Invention); G06K13/02 (Core/Invention)

International class (IPC 1–7)**:** G06K13/12

CPC: G06K13/12

European class: G06K13/12

Classification Explorer

Abstract:
Source: DE2363449B1 The paper−stacking device is such that forms of varying sizes e.g. occurring in restaurant operation, can be stacked together as they emerge from a cash register. The device comprises a stack holder which is open at the top and is arranged under an opening in the housing of the register. Angled corner pieces at the opening form a receiving channel over the holder. The base of the holder is arranged underneath a front blade guide whose upper part is shorter than the lower. The sliding stacker has pliable pieces which come into working contact with the cut form until it is released.

0) US3351563A – PRODUCTION OF HYDROGEN–RICH SYNTHESIS GAS

117) Family number: 29965 (US3351563A) © PatBase

Title: PRODUCTION OF HYDROGEN–RICH SYNTHESIS GAS

Priority: FR19640976603 19640601 US19630285672 19630605

Family:

Publication number	Publication date	Application number	Application date
AU4496364 A1	19651202	AU19640044963	19640526
BE648834 A	19641204		19640604
DE1467004 A1	19681219	DE19641467004	19640603
FR1400701 A	19650528	FR19640976603	19640601
GB1006745 A	19651006	GB19640021989	19640527
JP48022597 B4	19730706	JP19640031735	19640605
NL6406292 A	19641207	NL19640006292	19640604
US3351563 A	19671107	US19630285672	19630605

Probable Assignee: CHEMICAL CONSTRUCTION CORP

Assignee(s):(std)**:** CHEMICAL CONSTRUCTION CORP

Inventor(s):(std)**:** SAMUEL NEGRA JOHN ; NEGRA JOHN S ; MAC BARCLAY KENNETH

Inventor(s): BARCLAY KENNETH MAC ; JOHN SAMUEL NEGRA AND KENNETH MAC BARCLAY

International class (IPC 8–9)**:** C01B3/00 C01B3/38 C10G51/02 (Advanced/Invention); C01B3/00 C10G51/00 (Core/Invention)

International class (IPC 1–7)**:** C01B3/38

CPC: C01B3/38 C01B3/384 C01B3/388 C10G2400/26

European class: C01B3/38 C01B3/38B C01B3/38S C10G51/02 M10G400/26

US class: 252/373 48/213 48/214A

Classification Explorer

Cited documents: USRE24311 E, US3262886 A, US2940840 A, US2801159 A, US2565395 A, US2550742 A, US2524840 A, US2056911 A,

Forward Citations: WO8605769, WO13033812, WO11150217, US9595726, US9353322, US9340732, US9328920, US9328291, US9315452, US9273260, US9266730, US9234149, US9212319, US9169443, US9156691, US9127221, US9115324, US9034061, US9034058, US9012524, US8889746, US8748687, US8734548, US8734547, US8733459, US8728183, US8728182, US8669013, US8653149, US8652696, US8652222, US8648121, US8647402, US8557878, US8507566, US8502007, US8479834, US8479833, US8366795, US8361428, US8349039, US8328890, US8297542, US8286901, US6846404, US6693138, US4400182, US3531267, US2015191352, GB2388118, GB2388118, GB2388117, GB2388117, EP0069830, AU2003203442,

Abstract:
Source: GB1006745A <PICT:1006745/C4–C5/1> Hydrogen–rich synthesis gas containing principally H2, CO, CO2 and steam is produced by continuous steam reforming of naphtha wherein naphtha preheated to a temperature below 1000 DEG F. (540 DEG C.), preferably 400–800 DEG F., is mixed with steam preheated to at least 1000 DEG F., preferably 1500–1800 DEG F., at a steam–carbon ratio between 2 and 6: 1, preferably 5–6: 1, to form a mixture at least 1000 DEG F., preferably 1400–1700 DEG F., the mixture is allowed to react for up to 1 second, preferably 0.05–0.33 second, and the partially reacted mixture is passed at a linear velocity of at least 5 ft./sec., preferably 10–30 ft./sec., into an externally heated reforming catalyst of supported nickel or cobalt maintained at a temperature of at least 1400 DEG F. (760 DEG C.). A pressure of 1–22 atmos. may be used. Preferably the partially reacted gas mixture is divided into a plurality of separate streams and passed downwardly through a vertically disposed bed of catalyst so that local depression of temperature is avoided and the deposition of free carbon and formation of lower hydrocarbons does not occur. In the Figure, vaporized liquid naphtha, 3, steam 4, and optionally CO2 5, are mixed, passed through initial reaction zone 8 in less than 1 second, and passed into catalytic reformer 10; 10 comprises catalyst beds 12 in reformer tubes 11 which are heated by combustion of fluid hydrocarbon 13 in air 14. The reformed gas product is withdrawn at 16 and has a typical analysis 72.4 percent H2, 14.7 percent CO2, 11.5 percent CO, 1.0 percent methane. Pure hydrogen may be

obtained by oxidation of CO and removal of CO2 with hot K2CO3. Examples describe the production of gas of 70 percent H2 content and to the formation of methanol synthesis gas from an initial mixture containing naphtha, steam and CO2. The naphtha feed had an initial boiling point of 130 DEG F., and end−pt. of 380 DEG F., specific gravity at 60 DEG F. of 0.725 and a sulphur content of 4 p.p.m.ALSO:<PICT:1006745/C1/1> Hydrogen−rich synthesis gas containing principally H2, CO, CO2 and steam is produced by continuous steam reforming of naphtha wherein naphtha preheated to a temperature below 1000 DEG F. (540 DEG C.) is mixed with steam pre−heated to at least 1000 DEG F., at a steam−carbon ratio between 2: 1 and 6: 1 to form a mixture at 1000 DEG F. at least, the mixture is allowed to react for up to 1 second and is then passed at a linear velocity of at least 5 feet/second into an externally heated reforming catalyst of supported nickel or cobalt maintained at 1400 DEG F. (760 DEG C.) at least; 1−22 atmospheres pressure may be employed. In the Figure vaporized liquid naphtha 3, steam 4, and optionally CO2 5, are mixed and passed consecutively into initial reaction zone 8 and catalytic reformer 10, the latter comprising catalyst beds 12 in reformer tubes 11, heated by combustion of fluid hydrocarbon 13 in air 14. The reformed gas product typically analyses 72.4 percent H2, 14.7 percent CO2, 11.5 percent CO, 1.0 percent CH4. Pure hydrogen is obtained by oxidizing CO to CO2 and absorbing the latter in hot K2CO3.

0) US5429057A – CANTILEVERED SNACK TRAY BUTTRESSED BY LOWER TOR...

118) Family number: 12008008 (US5429057A) © PatBase

Title: Cantilevered snack tray buttressed by lower torso

Priority: US19940222576 19940404

Family:

Publication number	Publication date	Application number	Application date
US5429057 A	19950704	US19940222576	19940404

Probable Assignee: BUESCHER JOHN C

Assignee(s):(std)**:** BUESCHER JOHN C

Inventor(s):(std)**:** BUESCHER JOHN C

International class (IPC 8–9)**:** A47B23/00 (Advanced/Invention); A47B23/00 (Core/Invention)

International class (IPC 1–7)**:** A47B23/00

CPC: A47B23/002

European class: A47B23/00C

US class: 108/43

Classification Explorer

Cited documents: US5221032 A, US5209370 A, US5186375 A, US5176274 A, US5152398 A, US5127339 A, US5110170 A, US5106156 A, US5074222 A, US5062674 A, US5052603 A, US4976204 A, US4867331 A, US4715293 A, US4497433 A, US4243249 A, US4156484 A, US3656683 A, US3656681 A, US3541976 A, US3361091 A, US3172636 A, US3125825 A, US3090330 A, US3009613 A, US2808191 A, US2806609 A, US2304705 A,

Forward Citations: US9289015, US9254031, US7870951, US7025199, US6427607, US2014059733, US2010236452, US2009021058,

Abstract:
Source: US5429057A A tray for mounting on the torso of a wearer which includes a tray surface capable of holding objects and a three–point support system employing an anchor tab and two side buttress panels. The tray surface may contain holes for beverage containers, eating utensils napkins or the like. The tray is formed from a relatively rigid sheet of material such as corrugated cardboard or the like and may be printed with indicia such as advertisements.

0) FR2257198A – PACKAGING CARTON FOR DEEP FROZEN FISH – HAS TAB...

119) Family number: 30815678 (FR2257198A) © PatBase

Title: PACKAGING CARTON FOR DEEP FROZEN FISH – HAS TAB PROJECTIONS AND PASS THROUGH SLITS IN COVER PANELS

Priority: FR19730044989 19731217

Family:

Publication number	Publication date	Application number	Application date
FR2257198 A5	19750801	FR19730044989	19731217

Probable Assignee: HABIG OHG GUSTAV

Assignee(s):(std)**:** HABIG OHG GUSTAV

Assignee(s): HABIG OHG GUSTAV DT

International class (IPC 8–9)**:** B65D5/66 (Advanced/Invention); B65D5/64 (Core/Invention)

International class (IPC 1–7)**:** B65D5/22 B65D81/18

CPC: B65D5/6626

European class: B65D5/66D

Classification Explorer

Forward Citations: FR2425385, EP0619233,

Abstract:
Source: FR2257198A (Claim 1) 1.– Carton d'emballage pour produits alimentaires congeles et plus particulierement le poisson, ce carton etant realise en une coupe en une seule piece, recouverte de chaque csote de cire et comportant un fond ainsi qu'un couvercle, de meme que des parties laterales rabattables vers le haut et dont les parties assurant la fermeture sont separees des faces laterales par des rainures de pliage, caracterise en ce que chacune des parties fermantes du car ton presente un prolongement qui depasse de un cm environ la largeur des rabats et qui, le carton etant replie, vient se loger entre les rabats lateraux et le couvercle ferme tout en depassant vers l'interieur dans l'emballage. One piece of cardboard is coated with wax except for a band (7) on the lid for printing. Each corner (1') folds along a diagonal line to give a double layer of material. The tabs (2) at each corner are wider than the side fold (4) and project inwards. At the front, a wide full length tongue (5) folds over the front tabs and has a slit near each end. The lid (5) folds over the front tab and has a slit near each corner forming two tongues. These pass through the slits at the front and under the corner tabs and side folds to give a secure fixing.

0) US4829742A – AUTOMATIC MACHINE FOR THE CONTINUOUS PRODUCTION...

120) Family number: 31158735 (US4829742A) © PatBase

Title: AUTOMATIC MACHINE FOR THE CONTINUOUS PRODUCTION OF DUAL–USE FILTER SACHETS FOR INFUSION PRODUCTS

Priority: IT19870003376 19870309

Family:

Publication number	Publication date	Application number	Application date
CH674497 A	19900615	CH19880000445	19880209
DE3807795 A1	19880922	DE19883807795	19880309
DE3807795 C2	19960215	DE19883807795	19880309
GB2201934 A1	19880914	GB19880005465	19880308
GB2201934 B2	19910116	GB19880005465	19880308
GB8805465 A0	19880407	GB19880005465	19880308
IT1207626 A	19890525	IT19870003376	19870309
IT8703376 A0	19870309	IT19870003376	19870309
JP2118972 C3	19961206	JP19880052769	19880308
JP63317414 A2	19881226	JP19880052769	19880308
JP8015895 B4	19960221	JP19880052769	19880308
US4829742 A	19890516	US19880154782	19880210

Probable Assignee: CESTIND CENTRO STUDI INDUSTRIALI SRL

Assignee(s):(std): A OZZANO EMILIA BO ; CENTIND CENTRO STUDI IND S R L ; CESTIND CENTRO STUDI IND ; OZZANO EMILIA BO A ; CHIESUTEINDO CENTRO SUTOUDEI IND SRL

Assignee(s): CESTIND CENTRO STUDI INDUSTRIALI SRL ; CESTIND CENTRO STUDI INDUSTRIALI S R L CASTEL SAN PIETRO TERME BOLOGNA IT ; CESTIND CENTRO STUDI INDUSTRIALI S R L CASTEL SAN ; CESTIND CENTRO STUDI INDUSTRIALI S R L ; CENTIND CENTRO STUDI INDUSTRIALI S R L ; CENTIND CENTRO STUDI INDUSTRIALI SRL

Inventor(s):(std): ANDOREA ROMANIYOORI ; ANDREA ROMAGNOLI ; ROMAGNOLI ANDREA

Inventor(s): ROMAGNOLI ANDREA SAN LAZZARO DI SAVENA BOLOGNA IT

International class (IPC 8–9): B65B11/48 B65B29/04 B65B5/10 B65B9/10 (Advanced/Invention); B65B11/48 B65B29/00 B65B5/10 B65B9/10 (Core/Invention)

International class (IPC 1–7): B65B11/48 B65B29/02 B65B29/04 B65B5/02 B65B5/10 B65B51/26 B65B9/06 B65B9/10 B65B9/12 B65D

CPC: Y10T156/12 Y10T156/1737 Y10T156/1773 B65B29/04

European class: B65B29/04

US class: 156/436 156/466 156/510 156/553 156/568 53/117 53/134 53/134.2 53/135.2 53/171 53/234 53/540 53/550

Classification Explorer

Cited documents: US4689100 A, US4663915 A, US4272944 A, US4021993 A, US3566573 A, US2919990 A, US2226181 A, GB2170777 A1, DE3603959 A1, DE3008633 A1, DE1178347 B, DE1001944 B,

Forward Citations: WO9849061, US8272418, US6675553, US6571537, US6152683, US5979144, US5951452, US5893256, US5882472, US5878554, US5874149, US5871789, US5865924, US5863575, US5632132, US5580408, US5552164, US5439529, US5399224, US5311724, US2008107765, US2003192289, TR25494, EP1749752, EP1749752, EP0806351, EP0489554, CN104024111,

Abstract:
Source: US4829742A An automatic machine for the continuous production of dual–use filter sachets for infusion products, the filter sachets being in the form of bags or pouches containing successive portions of the products. Along the production line there are a succession of devices designed to effect step by step the longitudinal folding and sealing of a strip of filter paper forming therefrom a horizontally extending flattened tube and for the

transverse thermal welding of the tube in a manner such as to enclose said individual dosed fractions. A rotary wheel has pickup elements for applying to the flattened tube equidistantly spaced labels, a longitudinally continuous thread transversely contacting the labels, as well as stickers or tabs weldable by alternate transverse thermal welding partly to the back of the labels. The tube is then sectioned into portions comprising at least two bags and the bags are set back to back and sealed together at their extremities.

- **search:** SS4 FT="can end" and (beverage* or food*) and (orient* or guid*) and tab (Results 74)
- List: SS4 1–50 (FT="can end" and (beverage* or food*) and (orient* or guid*) and tab) (Results 74)

0) US2003034346A – CAN END

1) Family number: 28086988 (US2003034346A) © PatBase

Title: Can end

Priority: EP20020761392 20020816 EP20070012544 20020816 JP20070513329 20050512 US20040834671 20040429 US20040846259 20040514 US20010931497 20010816 US20020219914 20020815 US20030680644 20031007 US20040847172 20040517 US20050235653 20050926 US20070929072 20071030 US20090497306 20090702 US20090497301 20090702 WO2005US16546 20050512 WO2002US26089 20020816 WO2005US16546 20061213

Family:

Publication number	Publication date	Application number	Application date
AT369293 E	20070815	AT20020761392T	20020816
AT466779 E	20100515	AT20050749997T	20050512
AU2002326666 AA	20030303	AU20020326666	20020816
AU2002326666 BB	20060223	AU20020326666	20020816
AU2002326666 CA	20061130	AU20020326666	20020816
AU2005245402 AA	20051201	AU20050245402	20050512
AU2005245402 BB	20110811	AU20050245402	20050512
BRPI0211974 A	20040921	BR2002PI11974	20020816
BRPI0211974 B1	20120529	BR2002PI11974	20020816
BRPI0511128 A	20071127	BR2005PI11128	20050512
CA2566679 AA	20061114	CA20052566679	20050512
CA2566679 C	20100420	CA20052566679	20050512
CN101014503 A	20070808	CN200580023805	20050512
CN101014503 B	20110209	CN200580023805	20050512
CN1284704 C	20061115	CN20028018080	20020816
CN1555327 A	20041215	CN20028018080	20020816
DE602005021102 D1	20100617	DE200560021102T	20050512
DE60221675 D1	20070920	DE20026021675	20020816
DE60221675 T2	20080605	DE20026021675T	20020816
DE60243897 D1	20121220	DE20026043897	20020816
EG24911 A	20101219	EG20060001086	20061113
EP1425225 A1	20040609	EP20020761392	20020816
EP1425225 B1	20070808	EP20020761392	20020816
EP1755966 A1	20070228	EP20050749997	20050512
EP1755966 B1	20100505	EP20050749997	20050512
EP1834885 A2	20070919	EP20070012544	20020816
EP1834885 A3	20071003	EP20070012544	20020816
EP1834885 B1	20121017	EP20070012544	20020816
ES2290328 T3	20080216	ES20020761392T	20020816
ES2343533 T3	20100803	ES20050749997T	20050512
IN06765DN2006 A	20070831	IN2006DN06765	20061114
IN249633 B	20111104	IN2006DN06765	20061114
JP2007537107 T2	20071220	JP20070513329T	20050512
JP3163018 U	20100924	JP20100004775U	20100715
KR100522317 B1	20051018	KR20047002292	20020816
KR100862404 B1	20081008	KR20067026240	20050512
KR20040030127 A	20040408	KR20047002292	20020816
KR20070028414 A	20070312	KR20067026240	20061213
MXPA04001409 A1	20050606	MX2004PA01409	20020816

MXPA06013204 A1	20070228	MX2006PA13204	20050512	
NZ531485 A	20060127	NZ20020531485	20020816	
NZ551368 A	20100430	NZ20050551368	20050512	
RU2004105148 A	20050227	RU20040105148	20020816	
RU2006142349 A	20080620	RU20060142349	20050512	
RU2270794 C2	20060227	RU20040105148	20020816	
RU2424166 C2	20110720	RU20060142349	20050512	
TR200606355 T2	20070122	TR20060006355T	20050512	
US2003034346 AA	20030220	US20010931497	20010816	
US2003042258 AA	20030306	US20020219914	20020815	
US2004065663 AA	20040408	US20030680644	20031007	
US2004200838 AA	20041014	US20040834671	20040429	
US2004211780 AA	20041028	US20040847172	20040517	
US2005006388 AA	20050113	US20040846259	20040514	
US2006096994 AA	20060511	US20050235653	20050926	
US2008050207 AA	20080228	US20070929072	20071030	
US2009266824 AA	20091029	US20090497306	20090702	
US2009269169 AA	20091029	US20090497301	20090702	
US6772900 BB	20040810	US20010931497	20010816	
US7004345 BB	20060228	US20020219914	20020815	
US7174762 BB	20070213	US20030680644	20031007	
US7350392 BB	20080401	US20040847172	20040517	
US7556168 BB	20090707	US20040846259	20040514	
US7644833 BB	20100112	US20050235653	20050926	
US8052005 BB	20111108	US20090497306	20090702	
US8104319 BB	20120131	US20090497301	20090702	
US8328492 BB	20121211	US20070929072	20071030	
WO03016155 A1	20030227	WO2002US26089	20020816	
WO05113351 A1	20051201	WO2005US16546	20050512	
WO07038066 A1	20070405	WO2006US36403	20060919	

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** GOGOLA MICHAEL R ; GOPALASWAMY RAJESH ; REKSAM BEVERIDZH KEHN KOMPANI ; TURNER TIMOTHY ; REXAM BEVERAGE CAN CO ; FORREST RANDALL G ; TURNER TIMOTHY L

Assignee(s): FORREST RANDY G ; REXAM BEVERAGE CAN COMPANY

Inventor(s):(std)**:** FORREST RANDY G ; GOGOLA MICHAEL ; GOPALASWAMY RAJESH ; RAJESH FORREST RANDALL G TURNE ; RAJESH GOPALASWAMY ; TIMOTHY TURNER ; TURNER TIMOTHY ; TURNER TIMOTHY L ; TURNER TIMOTHY GOPALASWAMY RAJ ; TERNER TIMOTI ; RAJES GOPALASWAMY ; GOPALASVAMI RADZHESH ; GOGOLA MICHAEL R ; FORREST REHNDALL G ; FORREST RANDALL ; GOPALASHVAMI RADZHESH ; FORREST REHNDEHLL DZH ; FORREST RANDALL G

Inventor(s): FORREST RANDALL G TURNER TIMOTHY GOPALASWAMY RAJES ; FORREST RANDALL G PARK RIDGE ; TURNER TIMOTHY GOPALASWAMY RAJESH FORREST RANDALLG ; TURNER TIMOTHY PORT CHARLOTTE ; GOPALASWAMY RAJESH ALPHARETTA ; RANDALL G FORREST

Agent(s): CULLENS PATENT AND TRADE MARK ATTORNEYS; CULLENS PTY LTD; SMART AND BIGGAR; REGAN ADDIS HEATHER; CAWLEY AIMEE ELIZABETH; PETER M KLOBUCHAR ESQ WALLENSTEIN WAGNER AND ROCKEY LTD; WALLENSTEIN WAGNER AND ROCKEY LTD; IP DEPARTMENT, SCHWARTZ COOPER CHARTERED; IP DEPARTMENT SCHWARTZ COOPER CHARTERED; UNGARETTI AND HARRIS LLP,INTELLECTUAL PROPERTY GROUP – PATENTS; UNGARETTI AND HARRIS LLP INTELLECTUAL PROPERTY GROUP PATENTS; SCHWARTZ COOPER CHARTERED; UNGARETTI AND HARRIS LLP

Designated states:

AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B21D11/10 B21D22/00 B21D51/26 B21D51/44 B65B7/00 B65D1/20 B65D17/32 B65D17/34 B65D17/50 B65D41/00 B65D43/02 B65D51/18 B65D53/06 B65D6/28 B65D6/30 B65D8/04 B65D8/08 B65D8/12 B65D8/18 B65D8/20 (Advanced/Invention); B21D51/44 B65D17/50 B65D43/02 B65D8/18 (Advanced/Non–invention); B21D51/38 B65D17/00 B65D17/28 B65D41/00 B65D6/00 B65D8/04 (Core/Invention)

International class (IPC 1–7): B21D51/30 B21D51/44 B65D1/20 B65D17/34 B65D17/50 B65D41/00 B65D51/18 B65D6/30 B65D8/04 B65D8/08 B65D8/18

CPC: B21D51/383 B65D2517/0062 Y10S220/906 B65D17/08 B65D17/06 B65D17/165 B65D17/502 B65D2517/0007 B65D2517/0011 B65D2517/0061 B65D2517/0076 B65D2517/0079 B65D2517/0082

European class: B21D51/38B B65D17/06 B65D17/08 B65D17/16B2 B65D17/50A1 L65D517/00Y1C L65D517/00Y2A L65D517/00Y7A1 L65D517/00Y7A1A L65D517/00Y7C1 L65D517/00Y7C3 L65D517/00Y7D1

US class: 220/254.1 220/254.100P 220/254.100S 220/269 220/27 220/270 220/270P 220/270S 220/359.1 220/359.100S 220/359.2 220/359.200S 220/364 220/600 220/619 220/906 413/1 413/11 413/17 413/1P 413/4 413/4S 413/56 413/8 413/8P 72/348 72/379.4

Classification Explorer

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Forward Citations: WO15077469, WO12170635, WO12112487, WO11088679, WO10118134, WO09023554, WO08131172, WO07038066, WO07021388, WO07021388, WO05113351, USD762114, USD750488, USD749415, USD727725, USD715144, USD672235, USD658980, USD640141, US9670049, US9604769, US9540137, US9499299, US9475607, US9446879, US9434505, US9371152, US9352379, US9263921, US9233784, US9199763, US9186924, US9145251, US9114451, US9085026, US9045325, US9016034, US8998027, US8998015, US8973780, US8967407, US8939695, US8931660, US8875936, US8851323, US8844747, US8820571, US8794469, US8757953, US8746489, US8733576, US8727169, US8708188, US8534490, US8534485, US8505765, US8496132, US8490825, US8464570, US8454292, US8371467, US8348086, US8328492, US8313004, US8287220, US8235244, US8205477, US8157119, US8104319, US8052005, US8011527, US7938290, US7743635, US7703624, US7644833, US7591392, US7556168, US7472575, US7350392, US7143623, US7107810, US7036348, US7004345, US6761281, US2015108130, US2013098925, US2012145712, US2012125933, US2012111874, US2012043325, US2012012586, US2011226771, US2011226636, US2011204055, US2011186575, US2011180535, US2011168713, US2011127268, US2011100854, US2011031256, US2011017737, US2010287886, US2010264140, US2010251799, US2010243663, US2010139358, US2010116374, US2010077790, US2010044383, US2010017882, US2009269169, US2009266824, US2009180999, US2009120943,

US2009095752, US2009039091, US2009039090, US2009020543, US2008257900, US2008050207, US2008014050, US2007284374, US2007039961, US2006191940, US2006096994, US2006071005, US2005252922, US2005115976, US2005044921, US2005006388, US2004211780, US2004200838, US2003042258, KR100862404, JP2014530794, JP2009286433, JP2007537107, EP1907150, EP1743719, CN104368687, CN104368687, CN104211001, AU2008287051, AU2008287051, AU2006272664, AU2005245402,

Abstract:
Source: US2003034346A An end member for a container. The end member has a central panel, a circumferential chuckwall, and a transition wall. The central panel is centered about a longitudinal axis and has a substantially planar peripheral edge. The curl defines an outer perimeter of the end member. The circumferential chuckwall extends downwardly from the curl to the transition wall. The transition wall connects the chuck wall with the substantially planar peripheral edge of the central panel. The transition wall has a folded portion extending outwardly relative to the longitudinal axis.

0) US2004238546A – CAN END

2) Family number: 29376168 (US2004238546A) © PatBase

Title: CAN END

Priority: EP20020252800 20020422 EP20030722438 20030410 US20040770791 20040203 US20040979068 20041101 US20090551907 20090901 US20060540238 20060928 WO2003EP03716 20030410 WO2005US39847 20051101 US20120425934 20120321 US20130952757 20130729

Family:

Publication number	Publication date	Application number	Application date
AT415217 E	20081215	AT20030722438T	20030410
AU2003229636 AA	20031103	AU20030229636	20030410
AU2003229636 BB	20080626	AU20030229636	20030410
AU2005302008 AA	20060511	AU20050302008	20051101
AU2005302008 BB	20120112	AU20050302008	20051101
BRPI0309446 A	20050209	BR2003PI09446	20030410
BRPI0309446 B1	20141007	BR2003PI09446	20030410
CA2482984 AA	20041019	CA20032482984	20030410
CA2482984 C	20120626	CA20032482984	20030410
CA2586079 AA	20070501	CA20052586079	20051101
CA2586079 C	20140527	CA20052586079	20051101
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HK1080782 A3	20060504	HK20060100609	20060113
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JP4280645 B2	20090617	JP20030585908T	20030410
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US2007029324 AA	20070208	US20060540238	20060928
US2010044383 AA	20100225	US20090551907	20090901
US2012175376 AA	20120712	US20120425934	20120321
US2013306658 AA	20131121	US20130952757	20130729
US7370774 BB	20080513	US20060540238	20060928
US7591392 BB	20090922	US20040979068	20041101
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VN8122 A1	20100125	VN20070001084	20051101	
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ZA200408419 A	20050830	ZA20040008419	20041018	
ZA200408419 A	20051130	ZA20040008419	20041018	

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN CORK AND SEAL TECHNOLOGIES CORP ; CROWN PACKAGING TECHNOLOGY INC ; METAL BOX PLC ; WATSON MARTIN ; FIELDS BRIAN ; LOCKLEY ANDREW ROBERT ; WATSON MARTIN J ; CROWN CORK AND SEAL TECH CORP ; CROWN CORK AND SEAL TECHNOLOGI ; KRAUN PEHKEHDZHING TEKNOLODZHI

Assignee(s): DEUTSCHE BANK AG ; WATSON MARTIN JOHN ; DEUTSCHE BANK NEW YORK BRANCH AGENT AG AS ; LOCKLEY ANDREW R ; DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; CROWN CORK AND SEAL TECHNOLOGIES ; CROWN CORK AND SEAL TECHNOLOGIES CO ; KRAUN PEHKEHDZHING TEKNOLODZHI INK ; CARNAUDMETALBOX PLC

Inventor(s):(std)**:** BRIAN FIELDS ; FIELDS BRIAN ; LOCKLEY ANDREW ROBERT ; MARTIN WATSON ; ROBERT LOCKLEY ANDREW ; WATSON MARTIN ; WATSON MARTIN JOHN ; ANDREW ROBERT LOCKLEY ; WATSON MARTIN J ; UOTSON MARTIN ; LOKLI EHNDRJU ROBERT ; LOCKLEY ANDREW R ; FILDZ BRAJAN

Inventor(s): LOCKLEY ANDREW ; MARTIN J WATSON

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; PETER MAXWELL AND ASSOCIATES; FETHERSTONHAUGH AND CO; GOWLING LAFLEUR HENDERSON LLP; RATLIFF ISMAY HILARY; WOODCOCK WASHBURN LLP; BAKER AND HOSTETLER LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B21D51/26 B21D51/38 B21D51/44 B65D1/12 B65D17/00 B65D17/34 B65D25/00 B65D6/28 B65D6/30 B65D8/04 B65D8/06 B65D8/12 B65D8/20 (Advanced/Invention); B65D1/12 B65D17/00 (Advanced/Non–invention); B21D51/38 B65D8/20 (Core/Invention); B21D B65D (Subclass/Invention)

International class (IPC 1–7): B21D51/38 B65D17/00 B65D17/34 B65D6/28 B65D8/04 B65D8/06 B65D8/20

CPC: B65D25/00 B65D2517/0014 B65D2517/0062 B65D2517/0079 Y10S220/906 B65D17/08

European class: B65D17/08 L65D517/00Y2C L65D517/00Y7A1A L65D517/00Y7C3

US class: 220/269 220/600 220/610 220/619 220/623 220/624 220/906

Classification Explorer

Cited documents: WO9924326 A1, WO99024326, WO9834743 A1, WO03059764 A1, WO03035494 A1, WO0243895 A1, USD480304 S1, USD471453 S1, USD452155 S1, US928844, US8496132 BB, US7591392 BB, US7370774 BB, US6772900 BB, US6736283 BA, US6702142 BB, US6561004 BA, US6516968 BB, US6499622 BA, US6460723 BB, US6419110 BA, US6370818 BA, US6158608 A, US6102243 A, US6089072 A, US6089072, US6065634 A, US5950858 A, US5829623 A, US5645189 A, US5590807, US4928844 A, US4928844, US4832223 A, US4808052 A, US4796772 A, US4577774 A, US4434641 A, US3843014 A, US3441170 A, US2004238546 AA, US2004159697 AA, US2004094559 AA, US2004074911 AA, US2003173367 AA, US2003121920 AA, US2003042258 AA, US2003010785 AA, US2002134788 AA, JP64045251, JP5112357 A2, JP2003136168 A2, JP11505791, EP1361164 A1, EP1105232 B1, EP1105232 A1, EP0828663 B1, EP0828663, EP0303837 A2,

Forward Citations: WO14194058, WO14150673, WO14143820, WO14055399, WO13067398, WO12174058, WO06050465, USD787952, USD770895, USD763969, USD762114, USD751922, USD750488, USD749415, USD727725, USD715647, USD715162, USD715144, USD698668, USD695611, USD685266, USD672235, USD669781, USD658980, USD640141, USD612724, USD602776, USD600116, USD579771, US9580204, US9566634, US9550604, US9540137, US9499299, US9446879, US9371152,

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Abstract:
Source: US2004238546A A can end having a countersink bead, an inclined chuck wall and a strong seam, resists distortion from its circular profile when subjected to thermal processing or when packaging carbonated beverages. This high hoop strength affects the manner in which the can end ultimately fails when placed under extreme abuse conditions, even if buckle pressure performance is within industry specified standards. The can end of the invention has control features introduced which control the failure mode whilst maintaining specified buckle pressure performance. In one embodiment, the control feature comprises expansion of the countersink bead to act as a trigger for local peaking, together with a groove in the chuck wall which prevents the peaking force from being concentrated at a single point which could result in leaking by the production of a pin hole.

0) US2013075296A – MARKING OF CAN ENDS AND/OR PULL TABS USING PHOT...

3) Family number: 53291841 (US2013075296A) © PatBase

Title: MARKING OF CAN ENDS AND/OR PULL TABS USING PHOTONICALLY SENSITIVE INK

Priority: AU20120316033 20120927 AU20160201319 20160301 US20120628968 20120927 US20120347796 20120927 US20120345547 20120927 US20110539784P 20110927 US20120629071 20120927 WO2012US57507 20120927 WO2012US57518 20120927

Family:

Publication number	Publication date	Application number	Application date
AU2012316033 AA	20130404	AU20120316033	20120927
AU2012316040 AA	20130404	AU20120316040	20120927
AU2016201319 AA	20160317	AU20160201319	20160301
AU2016201319 BB	20170504	AU20160201319	20160301
BR112014007448 A2	20170404	BR20141107448	20120927
BR112014007452 A2	20170425	BR20141107452	20120927
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CA2850176 AA	20140326	CA20122850176	20120927
CN103946119 A	20140723	CN201280058178	20120927
CN104024115 A	20140903	CN201280058176	20120927
CO6920277 A2	20140410	CO20140066683	20140328
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EP2797818 A2	20141105	EP20120779215	20120927
HK1200420 A1	20150807	HK20150100738	20150123
HK1201502 A1	20150904	HK20150101959	20150227
JP2015501259 T2	20150115	JP20140533311T	20120927
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MX2014003640 A1	20140521	MX20140003640	20120927
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SG11201400991W A	20140428	SG20141100991	20120927
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WO13049313 A2	20130404	WO2012US57507	20120927
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WO13049320 A1	20130404	WO2012US57518	20120927

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std): CROWN PACKAGING TECHNOLOGY INC ; CROWN PACKAGING TECHONOLOGY INC ; VAUGHAN LAURA JANE ; GROWN PACKAGING TECHNOLOGY INC ; KRAUN

PEKEDZHING TEKNOLODZHI INK

Assignee(s): COLVILLE STEPHEN MILES ; RAMSEY CHRISTOPHER PAUL ; MCGIRR LAURA JANE ; DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS

Inventor(s):(std)**:** CHRISTOPHER PAUL RAMSEY ; COLVILLE STEPHEN MILES ; CRISTOPHER PAUL RAMSEY ; LAURA JANE MCGIRR ; MAKDZHIRR LAURA DZHEJN ; MCGIRR LAURA JANE ; RAMSEY CHRISTOPHER PAUL ; REMSI KRISTOFER POL ; STEPHEN MILES COLVILLE ; VAUGHAN LAURA JANE

Agent(s): PETER MAXWELL AND ASSOCIATES; GOWLING LAFLEUR HENDERSON LLP; SILVANA MARIA LOPEZ DIAZ; LIND ROBERT; INO SARI; DESHIMARU TAKESHI; MATSUSHITA MITSURU; KURASAWA ICHIRO; KUMAKURA YOSHIO; BAKER AND HOSTETLER LLP; FULLMER HAROLD H

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B05D3/06 B21D51/38 B21D51/44 B23K26/00 B23K26/36 B41M5/26 B41M5/28 B41M5/30 B41M5/323 B41M5/46 B65B43/00 B65D17/00 B65D17/34 B65D17/347 B65D17/353 B65D25/20 B65D41/32 B65D51/00 B65D51/24 G06K1/12 G06K19/06 G06K19/10 G06K7/00 (Advanced/Invention);
B21D51/38 B41M5/24 (Advanced/Non–invention);
B41M5/26 B65D17/00 G06K19/06 (Core/Invention);
B41M B65D G06K (Subclass/Invention)

CPC: B65D17/161 B21D51/383 B65D41/32 B41M5/24 B41M5/28 B65D17/165 B65D2517/0052 B65D2517/0053 B65B61/26 B65D51/245 B65B43/00 B65D51/00 B23K26/364 B23K26/361

US class: 1/1 206/459.5 219/121.85 220/212 220/270 220/273 413/14 413/18 413/25 427/556 53/492

Classification Explorer

Cited documents: WO9909853 A2, WO9711892 A1, WO9530546 A1, WO09093028 A2, WO07007102 A2, WO05068207 A1, WO02068205 A1, WO0183308 A1, WO0168460 A2, WO0043456 A1, WO0003832 A1, US8543424 BB, US7914640 BB, US7485403 BB, US7150597 BB, US6926487 BA, US6854947 BB, US6777098 BB, US6706995 BB, US6634516 BB, US6602595 BB, US6590183 BA, US6501046 BA, US6498318 BA, US6479787 BA, US6476349 BA, US6433302 BA, US6157314 A, US6105806 A, US6080958 A, US6019831 A, US6017972 A, US5992892 A, US5928780 A, US5911921 A, US5884079 A, US5682983 A, US5578120 A, US5511920 A, US5492077 A, US5489639 A, US5350792 A, US5273149 A, US5053440 A, US4880137 A, US4559961 A, US4559729 A, US4476781 A, US4375025 A, US3898417 A, US2013270269 AA, US2013196037 AA, US2012205386 AA, US2011226636 AA, US2011111142 AA, US2011100854 AA, US2011084051 AA, US2010264215 AA, US2010193519 AA, US2010078010 AA, US2010058630 AA, US2010056830 AA, US2010015558 AA, US2009117353 AA, US2007080229 AA, US2005270358 AA, US2005045637 AA, US2004108237 AA, US2003192211 AA, US2001011431 AA, JPS4982340, JP8127670 A2, JP4982340 B2, JP49082340 A2, JP2011020701 A2, JP2011016546 A2, JP2010004523 A2, JP2005324816 A2, JP2001063729 A2, JP11001065 A2, GB2309215 A1, EP1365923 B1, EP1365923 A1, EP1218248 B1, EP1218248 A2, EP1113901 A1, EP0993964 A2, EP0797511 A1, EP0522370 A1, DE10254060 A1, CN201890427 U, CN101445170 A, CA2307074 AA, CA2301655 AA, CA2301655,

Forward Citations: WO17012344, WO17008725, WO16192419, WO16183452, WO15013081, WO14072455, WO14072455, USD776530, USD688553, US9340368, US9259913, CN105819062, CN105691824, CN105517924, CN105398647, CN105151470, CN105151469, AU2014293487,

Abstract:
Source: US2013075296A A system and method for laser marking can ends, especially pull tabs, includes coating a portion of the can end and/or pull tab with a lacquer having a photonically active material and directing a laser to the lacquer to alter the appearance of the of the photonically active material to form an image, especially a high resolution image. The decorated can end and/or tabs may have a high resolution image.

0) US2011297679A – CAN END PRODUCED FROM DOWNGAUGED BLANK

4) Family number: 50072330 (US2011297679A) © PatBase

Title: CAN END PRODUCED FROM DOWNGAUGED BLANK

Priority: US20100795434 20100607 US20170417830 20170127 WO2011US39459 20110607

Family:

Publication number	Publication date	Application number	Application date
BR112012031227 A2	20161025	BR20121131227	20110607
EP2576367 A1	20130410	EP20110726288	20110607
RU2012155151 A	20140720	RU20120155151	20110607
RU2572770 C2	20160120	RU20120155151	20110607
US2011297679 AA	20111208	US20100795434	20100607
US2017137169 AA	20170518	US20170417830	20170127
US9566634 BB	20170214	US20100795434	20100607
WO11156386 A1	20111215	WO2011US39459	20110607

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** FORREST RANDALL G ; GOGOLA MICHAEL R ; REKSAM BEVERIDZH KEHN KOMPANI ; REXAM BEVERAGE CAN CO

Assignee(s): REXAM BEVERAGE CAN COMPANY

Inventor(s):(std)**:** FORREST RANDALL ; FORREST RANDALL G ; FORREST REHNDEHLL DZH ; GOGOLA MAJKL R ; GOGOLA MICHAEL R

Inventor(s): RANDALL FORREST ; MICHAEL R GOGOLA

Agent(s): LANE CATHAL MICHAEL; GREER BURNS AND CRAIN LTD; KLOBUCHAR PETER M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D22/24 B21D51/38 B21D51/44 B65D17/00 B65D17/34 B65D51/18 (Advanced/Invention)

CPC: B21D22/24 B21D51/383 B65D2517/0014 B65D2517/0062 B65D17/165 B21D51/44

European class: B65D17/16B2 L65D517/00Y2C L65D517/00Y7A1A

US class: 220/254.1 220/254.100P 413/8 413/8S

Classification Explorer

Cited documents: WO9901351 A2, WO9834743 A1, WO9637414 A1, WO07005564 A2, WO05113352 A1, WO03053800 A1, WO0141948 A2, USRE33217 E, US7591392 BB, US7370774 BB, US7341163 BB, US6748789 BB, US6736283 BA, US6516968 BB, US6499622 BA, US6460723 BB, US6419110 BA, US6234336 BA, US6126034 A, US6065634 A, US6024239 A, US5987956 A, US5527143 A, US5502995 A, US5356256 A, US5331836 A, US5149238 A, US5062287 A, US5046637 A, US4991735 A, US4977772 A, US4928844 A, US4865506 A, US4862722 A, US4832223 A, US4809861 A, US4808052 A, US4796772 A, US4790705 A, US4735863 A, US4722215 A, US4716755 A, US4713958 A, US4704887 A, US4685849 A, US4648528 A, US4641761 A, US4606472 A, US4587825 A, US4577774 A, US4571978 A, US4567746 A, US4561280 A, US4559801 A, US4467933 A, US4448322 A, US4434641 A, US4372720 A, US4217843 A, US4109599 A, US4093102 A, US4084721 A, US4031837 A, US3843014 A, US3774801 A, US3537291 A, US2010044383 AA, US2007029324 AA, US2005029269 AA, US2004074911 AA, US2003121924 AA, US2003121920 AA, US2003010785 AA, RU2361693 C1, RU2344056 C2, RU2278062 C2, RU2006142348, GB2193140 A1, GB2067159 A1, GB1604068 A, EP1306310 A2, EP0828663 B1, EP0497346 B1, EP0497346 A1, EP0153115 A2, EP0149823 A2, EP0149185 A2, EP0103074 A2,

Forward Citations: WO17023846, USD762114, USD750488, USD749415, USD727725, USD715144, US9580203, US9446879, US9233784, US9114451, US9033175,

Abstract:
Source: US2011297679A A can end for a two−piece beverage container has a curl positioned about a longitudinal axis which defines an outer perimeter of the can end. A circumferential wall angles downwardly and radially inwardly relative to a radially inner portion of the curl. A strengthening member extends radially inwardly relative to the circumferential wall. A center panel extends radially outwardly from the longitudinal axis towards the strengthening member and has a diameter greater than 87.7 percent of an overall diameter of the can end. A frangible score and a hinge portion define an openable tear panel in the center panel. A stay−on tab is attached to the center panel and has a nose portion overlying the tear panel opposite a lift end of the tab.

5) Family number: 46628648 (US2012024160A) © PatBase

Title: COFFEE BEAN PACKAGING CARTRIDGE AND COFFEE BEVERAGE SYSTEM INCLUDING SAME

Priority:

AU20100216509	20100217	AU20110216590	20110217	EP20100705202	20100217
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US20120587730	20120816				

Family:

Publication number	Publication date	Application number	Application date
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Probable Assignee: DOUWE EGBERTS BV KONINKLL

Assignee(s):(std)**:** GRAAFF GERBRAND KRISTIAAN ; KNEPPERS JOB LEONARDUS ; KONINKL PHILIPS ELECTRONICS NV ; KNITEL JOSEPH THEODOOR ; KONINK DOUWE EGBERTS B V ; KONINK DOUWE EGBERTS BV ; KONINKL DOUWE EGBERTS BV ; KONINKL PHILIPS NV ; KONINKLEJKE DAUVE EGBERTS BV ; KONIKLIJKE DOUWE EGBERTS BV ; MOORMAN CHRIS J M ; DE GRAAFF GERBRAND KRISTIAAN ; DILLON CHARLES KEVIN ; DOUWE EGBERTS BV ; DOUWE EGBERTS BV KONINKLL ; MOORMAN CHRISTIAAN JOHANNES MARIA ; SARA LEE ; PHILIPS ELECTRONICS N V KONINKLL ; KONINKLEJKE DAUVE EHGBERTS BV ; KONINKLEJKE FILIPS ELEKTRONIKS N V ; KONINKLEJKE FILIPS ELEKTRONIKS NV ; ROYAL DUTCH PHILIPS ELECTRONICS LTD ; PHILIPS KONINKLL NV ; KONINL PHILIPS ELECTRONICS NV ; SARA LEE DE NV ; VAN OS IVO ; VERSLUIJS RICHARD PATRICK ; SARA LEE DE B V ; SARA LEE DE BV

Assignee(s): SARA LEE DE N V NULL ; SARA LEE DE N V ; KONINKLEJKE FILIPS EHLEKTRONIKS NV ; KONINKLIJKE PHILIPS NV ; KONINKLIJKE DOUWE EGBERTS BV ; PHILIPS ELECTRONICS KONINKLL NV ; KONINKLIJKE PHILIPS ELECTRONIC N V ; KONINKLIJKE PHILIPS ELECTRONICS N V NULL ; PHILIPS ELECTRONIC KONINKLL NV ; KONINKLIJKE DOUWE EGBERTS B V ; DOUWE EGBERTS KONINKLL BV ; KONINKLIJKE PHILIPS ELECTRONICS N V

Inventor(s):(std): CHRISTIAAN JOHANES MATRIA MOORMAN ; CHRISTIAAN JOHANNES MARIA MOORMAN ; CHRISTIAN JOHANES MARIA MOHRMAN ; DE GRAAFF GERBRAND KRISTIAAN ; DE GRAF GERBRAND KRISTIAN ; DILLON CHARL Z KEVIN ; DILLON CHARLES KEVIN ; GERBRAND KRISTIAAN DE GRAAF ; GERBRAND KRISTIAAN DE GRAAFF ; GRAAFF GERBRAND KRISTIAAN ; GRAAFF GERBRAND KRISTIAAN DE ; IVO OS VAN ; IVO VAN OS ; JOB LEONARDUS KNEPPERS ; KNITEL JOZEF TEODOR ; KRISTIAAN DE GRAAFF GERBRAND ; LEONARDUS KNEPPERS JOB ; MOORMAN CHRIS J M ; MOORMAN CHRISTIAAN JOHANES MARIA ; MOORMAN CHRISTIAAN JOHANES MATRIA ; MOORMAN CHRISTIAAN JOHANNES MARIA ; CHARLES KEVIN DILLON ; CHRIS J M MOORMAN ; KNEPPERS JOB LEONARDUS ; KNITEL JOSEPH THEODOOR ; MORMAN KHRISTIAN JOKHANNES MARIJA ; OS IVO ; OS IVO VAN ; PATRICK VERSLUIJS RICHARD ; RICHARD PATRICK VERSLUIJS ; VAN OS IVO ; VERSLUIJS RICHARD PATRICK ; VERSLEJS RIKHARD PATRIK ; MOORMAN KRISTIAN JOKHANNES MARIJA ; DE GRAFF GERBRAND KRISTIAN ; KRISTIAAN GRAAFF GERBRAND ; GRAAF GERBRAND KRISTIAAN

Inventor(s): KNEPPERS JOB LEONARDUS 2635 LC ; VERSLUIJS RICHARD PATRICK 2645 GE ; VAN OS IVO 3811 MB ; KNITEL JOSEPH THEODOOR 3454 KJ ; CHRISTIAAN JOHANES MARIA MOORMAN ; MOORMAN CHRISTIAAN JOHANNES MARIA 5066 MJ ; JOSEPH THEODOOR KNITEL ; DILLON CHARLES KEVIN BOTTISHAM ; DE GRAAFF GERBRAND KRISTIAAN 2182 DN

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; FETHERSTONHAUGH AND CO; JANSEN CORNELIS MARINUS; VO; DURAN LUIS ALFONSO; LAZCANO JESUS; CABINET BEAU DE LOMENIE; OKABE YUZURU; TAKAHASHI SEIICHIRO; OCHI TAKAO; MATSUI TAKAO; MATSUI MITSUO; FOLEY AND LARDNER LLP; HATZMANN M J; JANSEN C M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A23F5/00 A23F5/08 A23F5/26 A23L1/28 A47J31/00 A47J31/057 A47J31/06 A47J31/10 A47J31/34 A47J31/36 A47J31/40 A47J31/42 A47J31/44 A47J31/46 A47J42/40 A47J42/42 A47J42/50 B65B1/04 B65B1/12 B65B3/04 B65D83/04 B65D83/06 B65D85/00 B65D85/804 (Advanced/Invention);
A47J31/36 A47J31/52 B65D85/804 (Advanced/Non–invention);
A47J31/40 A47J31/42 A47J42/00 (Core/Invention)

International class (IPC 1–7): A47J31/40 A47J31/42 A47J42/50

CPC: A23F5/26 B65B1/12 A23F5/262 A47J31/404 A47J31/3614 A47J31/52 B65D85/8043 A47J31/42 A47J31/44 A47J42/00 A47J31/00 A47J31/40 A47J42/50

European class: A47J31/40 A47J31/42 A47J42/50

US class: 1/1 141/1 141/108 141/311R 141/331 141/344 141/386 141/67 241/6 426/115 426/115S 426/231 426/433 426/518 99/280 99/280P 99/285 99/286 99/289R

Classification Explorer

Cited documents: WO9723155 A1, WO9723155, WO9407401 A2, WO200423956, WO10095937 A1, WO09046771 A1, WO09046771, WO04023956 A1, WO0148711 A1, WO0027262 A1, USRE45476 E, US9277838 BB, US9265377 BB, US8950318 BB, US8776671 BB, US8601937 BB, US8439235 BB, US8383180 BB, US8382017 BB, US8047124 BB, US7858135 BB, US7475628 BB, US7461587 BB, US7340991 BB, US7318374 BB, US7240611 BB, US7067168 BA, US7051646 BB, US7032322 BA, US7013796 BB, US6968775 BB, US6962104 BA, US6889599 BB, US6391360 BA, US6339985 BA, US6339985, US6079314 A, US6067894 A, US6067864, US5791526 A, US5632499 A, US5632449 A, US5463934 A, US5406882 A, US5386944 A, US5351604 A, US5338409 A, US5312637 A, US5309820 A, US5267507 A, US5241898 A, US5217108 A, US5193438 A, US5193438, US5094153 A, US4936515 A, US4925150 A, US4876953 A, US4865089 A, US4843956 A, US4791859 A, US4644856 A, US4555984 A, US4476776 A, US4326114 A, US4305328 A, US4271753 A, US3981234 A, US3973623 A, US3921178 A, US3871112 A, US3683790 A, US3490685 A, US3382310 A, US3356097 A, US3313332 A, US3263968 A, US3115097 A, US3036551 A, US3007352 A, US2962220 A, US2930216 A, US2917076 A, US2884269 A, US2856753 A, US2769393 A, US2704468 A, US2610468 A, US2579393 A, US2552167 A, US2296701 A, US2131034 A, US2013115351 AA, US2013101717 AA, US2013095219 AA, US2013095218 AA, US2011073690 AA, US2010308141 AA, US2010080886 AA, US2009165655 AA, US2009155302 AA, US2009145302 AA, US2009127363 AA,

US2008152478 AA, US2008098901 AA, US2007295752 AA, US2007137495 AA, US2007062378 AA, US2006201339 AA, US2006201339, US2005258287 AA, US2005028677 AA, US2005017107 AA, US2004173101 AA, US2004025703 AA, US2003025012 AA, US2002153438 AA, US2002129712 AA, US2002092941 AA, US2002002908 AA, US1981025 A, US1917355 A, US1869720 A, US1769776 A, US1755430 A, US1752006 A, US1604058 A, US1429487 A, US06339985, US05791526, US05632449, US05386944, US05193438, US04936515, US0201339, US0153438, US0145302, US0098901, RU2314739, JP9173213 A2, JP7505328 T2, JP7505328, JP7505323 T2, JP6339433 A2, JP61232176 A2, JP61232176, JP6046437 Y2, JP6046437 A2, JP57194178 U1, JP57194178 U, JP57194178 A2, JP55017956 Y2, JP5317185 A2, JP5161551 A2, JP4025629 U, JP3104362 U, JP3104362 U, JP3104361 U, JP3104361 U, JP2098825 U1, JP2006346061 A2, JP2006346061, JP2005071254 A2, JP2005071254, JP2003518676 T2, JP2003518676, JP2001314325 A2, JP2001314325, JP2001061664 A2, JP2001061664, JP09173213, JP07505328, JP05317185, JP05161551, JP04025629 U, JP02098825 U, GB2447678 A1, FR2565088 A1, EP2403386 B1, EP2403386 A1, EP2067421 A1, EP1826137, EP1700549 A1, EP1440642 A1, EP0804894 A2, EP0766943 A1, EP0605750 A1, EP0543591 A1, EP0452214 A1, EP02067421, EP0182137 A1, DE2926389 A1, DE20300933 U1, DE20300933 U, DE20300933, DE20300928 U1, DE20300928,

DE102007008900 A1

DE102007008898 A1

DE102007008898, DE1020070088, DE02926389, DE000020300928 U, CN2684713 Y, CN2684712 Y, CN2624781 Y, CN2606563 Y, CN201005518 Y, CN201005518 A, CN1830369 A, CN1413340 A, CN1313065 A, CN101268915 A, CN101212921 A,

Forward Citations: WO16113258, WO15180803, WO15104192, WO15078662, WO14185783, WO14184777, WO14045230, WO14045196, WO13057625, WO13057625, WO13048707, WO11102721, USD752910, USD751330, USD750408, USD750407, USD745306, USD745305, USD745304, USD745303, USD743729, USD743198, USD742158, USD741638, US9648982, US9622618, US9510710, US9439390, US9428329, US9428328, US9414710, US9339141, US9277838, US9265377, US9011955, US8944354, US8776671, US8763942, US2016095462, US2016015215, US2015351421, US2015157167, US2015144720, US2015118367, US2014361107, US2014007775, US2013213240, US2013101717, US2013095218, US2012138721, US2011256273, RU2596961, JP5966098, JP5702868, JP5599125, JP2016514978, JP2014533159, JP2014530700, JP2014530684, JP2014506828, JP2014506820, JP2012517879, ITMI20131974, FR3031441, EP3135161, EP3028609, EP2436288, DE202011109913, CN104812278, CN104159480, CN104159480, CN103874440, CN103654464, AU2012324492,

Abstract:
Source: US2012024160A A coffee bean packaging cartridge for holding and supplying multiple servings of coffee beans can be connected to a coffee beverage system. The cartridge includes a container having an outer wall defining an interior volume and an opening at one end thereof. A permanent, preferably non−removable closure member is fitted to the one end of the container and substantially covers the opening. An exit passage in the closure member, defines a coffee bean outlet, for transferring coffee beans from the interior volume. The closure member further has relatively movable closing means for selectively closing the exit passage to reduce exposure of the coffee bean contents to surrounding air. The cartridge further includes connecting means for connecting the cartridge to a coffee beverage system. There is also provided a coffee beverage system that includes the coffee bean packaging cartridge as defined above and at least a dosing device and a grinding mechanism. The dosing device may includes a metering chamber for receiving a portion of coffee beans corresponding to an amount necessary for preparing a single serving of coffee beverage.

0) US2008127705A – METHOD AND APPARATUS FOR MAKING TWO–PIECE BEVER...

6) Family number: 41861115 (US2008127705A) © PatBase

Title: METHOD AND APPARATUS FOR MAKING TWO–PIECE BEVERAGE CAN COMPONENTS

Priority: EP20070854860 20071130 US20060607468 20061130 WO2007US86048 20071130

Family:

Publication number	Publication date	Application number	Application date
DE602007029897 D1	20130613	DE200760029897T	20071130
EP2091676 A1	20090826	EP20070854860	20071130
EP2091676 B1	20130417	EP20070854860	20071130
ES2421628 T3	20130904	ES20070854860T	20071130
US2008127705 AA	20080605	US20060607468	20061130
US7797978 BB	20100921	US20060607468	20061130
WO08067522 A1	20080605	WO2007US86048	20071130

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** GILET PIERRE YVES ; KELLY SHAUN ; REXAM BEVERAGE CAN CO ; REXAM BEVERAGE CAN EUROP LTD ; REXAM BEVERAGE CAN EUROPE LTD ; SASSO JOSEPH A JR ; SASSO JOSEPH A

Assignee(s): REXAM BEVERAGE CAN EUROPE LIMITED ; REXAM BEVERAGE CAN EUROPE LTD LUTON ; REXAM BEVERAGE CAN CO CHICAGO ; REXAM BEVERAGE CAN COMPANY

Inventor(s):(std)**:** GILET PIERRE YVES ; KELLY SHAUN ; SASSO JOSEPH A ; SASSO JOSEPH A JR ; SASSO JR JOSEPH A

Inventor(s): SASSO JOSEPH A JR ROCKFORD

Agent(s): KILBURN AND STRODE LLP; HICKINSON KATIE LOUISE; CAWLEY AIMEE ELIZABETH; CARPINTERO MARIO; IP DEPARTMENT, SCHWARTZ COOPER CHARTERED; IP DEPARTMENT SCHWARTZ COOPER CHARTERED; UNGARETTI AND HARRIS LLP; KLOBUCHAR PETER M

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D11/10 B21D51/26 (Advanced/Invention); B21D11/00 B21D51/26 (Core/Invention)

CPC: Y10S72/715 B21D51/2692

European class: B21D51/26T

US class: 72/379.4 72/379.6 72/405.01 72/419 72/715 723/794

Classification Explorer

Cited documents: WO07020946 A1, US7108469 BB, US6945085 BA, US6802197 BB, US6463776 BA, US6349586 BA, US5626049 A, US5611454 A, US5572893 A, US5377518 A, US5301534 A, US5119657 A, US5095730 A, US4655677 A, US4567746 A, US4546873 A, US4454743 A, US4342404 A, US4213324 A, US4199073 A, US3990353 A, US3545631 A, US3029507 A, US2789344 A, US2350491 A, US2099449 A, US2088223 A, US2080399 A, US2005138984 AA, US1702278 A, US1492230 A, JP8257661 A2, JP2007045507 A2, JP2000015371 A2, EP1136154 A1,

Forward Citations: US9016101, US2016354831, US2010251798, EP2353745, DE102010000094, DE102010000094, AU2010235077,

Abstract:
Source: US2008127705A A method of forming two–piece beverage can components is described. The method requires providing a plurality of pre–punched metallic disks. A disk feeder transfers at least one of the plurality of pre–punched metallic disks to a first process station in a plurality of processing stations. The first disk is deformed

during a two−piece beverage can component manufacturing process is performed at the first station. The deformed disk is removed from the first station and transferred to each subsequent processing station in the plurality of processing stations. Further two−piece beverage can component manufacturing processes are performed in each subsequent processing station to produce a substantially finished two−piece beverage can component.

0) US2017107010A – VENTED BEVERAGE CAN AND CAN END

7) Family number: 60356747 (US2017107010A) © PatBase

Title: VENTED BEVERAGE CAN AND CAN END

Priority: US20130075622 20131108 US20130782316P 20130314 US20140950397P 20140310 WO2015US19642 20150310 US20150124408 20150310

Family:

Publication number	Publication date	Application number	Application date
AU2015229633 AA	20150917	AU20150229633	20150310
CA2942302 AA	20160909	CA20152942302	20150310
CN106488876 A	20170308	CN201580024567	20150310
CO20160001698 A2	20161121	CO20160001698	20160908
EP3116798 A1	20170118	EP20150710705	20150310
MX2016011701 A1	20161214	MX20160011701	20150310
US2017107010 AA	20170420	US20150124408	20150310
WO15138413 A1	20150917	WO2015US19642	20150310

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC

Assignee(s): FIELDS BRIAN ; DOSHI VIVEK ; KEANE BRENDAN

Inventor(s):(std)**:** BRENDAN KEANE ; BRIAN FIELDS ; DOSHI VIVEK ; FIELDS BRIAN ; KEANE BRENDAN ; VIVEK DOSHI

Agent(s): DAVIES COLLISON CAVE PTY LTD; GOWLING WLG CANADA LLP; LUZ HELENA ADARVE GOMEZ; LIND ROBERT; FULLMER HAROLD H

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D1/12 B65D17/00 B65D47/32 (Advanced/Invention); B65D17/00 (Core/Invention)

CPC: B65D17/165 B65D2517/0094 B65D1/12 B65D47/32 B65D2517/0014 B65D51/1672 B65D51/1683 B65D2517/0062 B65D2517/0082

US class: 220/269

Classification Explorer

Cited documents: WO14159208 A1, WO13067398 A2, US2011266281 AA,

Abstract:
Source: US2017107010A A beverage can end has a vent (40) that includes a button (50). The vent is actuated by downward force of a pull tab (70) that is transmitted to the vent score (42) through the button. The center panel (18) includes beads.

0) US2011056945A – FULL APERTURE BEVERAGE END

8) Family number: 48433182 (US2011056945A) © PatBase

Title: FULL APERTURE BEVERAGE END

Priority: EP20090169559 20090904 EP20100747877 20100902 US20100797171 20100609 US20100363492F 20100610 US20100393974 20100902 EP20150151688 20100902 WO2010EP62877 20100902

Family:

Publication number	Publication date	Application number	Application date
AU2010291195 AA	20110310	AU20100291195	20100902
CA138254 S	20110720	CA20100138254F	20101208
CA2772712 AA	20110310	CA20102772712	20100902
CN102625769 A	20120801	CN201080050055	20100902
CN102625769 B	20160113	CN201080050055	20100902
CO6511215 A2	20120831	CO20120039169	20120306
DE602010032367 D1	20160602	DE201060032367T	20100902
DK2878547 T3	20160725	DK20100151688T	20100902
EP2473414 A1	20120711	EP20100747877	20100902
EP2878547 A1	20150603	EP20150151688	20100902
EP2878547 B1	20160413	EP20150151688	20100902
ES2575203 T3	20160627	ES20150151688T	20100902
HK1174313 A1	20170317	HK20130101318	20130130
HU030328 T2	20170529	HU20150151688T	20100902
JP2013503788 T2	20130204	JP20120527320T	20100902
MX2012002712 A1	20120419	MX20120002712	20100902
RU2012112951 A	20131010	RU20120112951	20100902
RU2558341 C2	20150727	RU20120112951	20100902
SG10201405480P A1	20141030	SG20141005480	20100902
SG178957 A1	20120427	SG20120014874	20100902
TH121544 A	20130228	TH20121000924	20100902
US2011056945 AA	20110310	US20100797171	20100609
US2012269934 AA	20121025	US20100393974	20100902
US8939308 BB	20150127	US20100797171	20100609
USD641239 S1	20110712	US20100363492F	20100610
WO11026900 A1	20110310	WO2010EP62877	20100902
ZA201201609 A	20121128	ZA20120001609	20120302

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CHANT GARRY RICHARD ; CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC ; RAMSEY CHRISTOPHER PAUL ; LOCKLEY ANDREW ROBERT ; FIELDS BRIAN ; WATSON MARTIN JOHN ; HYDE ELEANOR RACHEL ANN ; KRAUN PEHKEHDZHING TEKNOLODZHI INK

Assignee(s): DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; CROWN PACKAGING TECHNOLOGY INC ALSIP

Inventor(s):(std)**:** FIELDS BRIAN ; FILDZ BRAJAN ; HYDE ELEANOR RACHEL ANN ; HYDE ELEANOS RACHEL ANN ; KHAJD EHLINOR REJCHEL EHNN ; LOCKLEY ANDREW ROBERT ; LOKLI EHNDRJU ROBERT ; RAMSEY CHRISTOPHER ; RAMSEY CHRISTOPHER PAUL ; REHMSI KRISTOFER POL ; UOTSON MARTIN DZHON ; WATSON MARTIN JOHN ; ROBERT LOCKLEY ANDREW ; RICHARD CHANT GARRY ; PAUL RAMSEY CHRISTOPHER ; JOHN WATSON MARTIN ; HYDE ELEANOR RACHEL ; ANN HYDE ELEANOR RACHEL ; CHANT GARRI RICHARD ; CHANT GARRY RICHARD ; BRIAN FIELDS

Inventor(s):

ANDREW ROBERT LOCKLEY ; ELEANOS RACHEL ANN HYDE ; MARTIN JOHN WATSON ; GARRY RICHARD CHANT ; ELEANOR RACHEL ANN HYDE ; CHRISTOPHER PAUL RAMSEY ; WATSON MARTIN JOHN WANTAGE ; RAMSEY CHRISTOPHER WANTAGE ; LOCKLEY ANDREW ROBERT WANTAGE ; HYDE ELEANOR RACHEL ANN WANTAGE ; FIELDS BRIAN LEMONT ; CHANT GARRY RICHARD WANTAGE

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; FETHERSTONHAUGH AND CO; SILVANA MARIA LOPEZ DIAZ; MARKS AND CLERK LUXEMBOURG LLP; SMITH DEBRA JANE CLARE; WHITE DUNCAN ROHAN; CARPINTERO MARIO; INO SARI; KURASAWA ICHIRO; MATSUSHITA MITSURU; DESHIMARU TAKESHI; KUMAKURA YOSHIO; SPRUSON AND FERGUSON ASIA PTE LTD; BAKER AND HOSTETLER LLP; WOODCOCK WASHBURN LLP; SMITH DEBRA

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65B43/26 B65D17/00 B65D17/28 B65D17/34 B65D17/347 B65D17/353 B65D17/40 (Advanced/Invention); B65D (Subclass/Invention)

International class (IPC 1–7): B65D17/28

CPC: B65D17/24 B65D17/165 B65D1/12 B65D2517/0013 B65D17/163

European class: B65D17/16B1 B65D17/24

US class: 220/269 220/270 220/273 426/122 53/492 53/492S D7/387 D9/434 D9/435

Locarno class: 09/07

Classification Explorer

Cited documents: WO10020375 A1, WO09002715 A2, WO03068615 A1, USRE30349 E, USD591149 S1, USD570213 S1, USD567657 S1, USD559680 S1, USD525127 S1, USD515353 S1, USD488376 S1, USD480304 S1, USD431413 S1, USD406236 S1, USD379588 S1, USD358988 S1, USD356456 S1, USD328864 S1, USD30338 S1, USD30094 S1, USD286508 S1, USD265280 S1, US79697210, US79697207, US7922025 BB, US7743768 BB, US7743635 BB, US7673768 BB, US7506779 BB, US7500376 BB, US7341163 BB, US7100789 BB, US6915553 BB, US6848875 BB, US6089072 A, US6065634 A, US5971259 A, US5957647 A, US5934498 A, US5911551 A, US5860553 A, US5711448 A, US5582319 A, US5356256 A, US5232114 A, US5052573 A, US4809861 A, US4271778 A, US4182460 A, US4096967 A, US4002262 A, US3951299 A, US3485410 A, US3477608 A, US3406866 A, US3301464 A, US2683579 A, US2010059530 AA, US2008067171 AA, US2007029324 AA, US2005284869 AA, US2004026433 AA, RU2278062, JP59209533 A2, JP59133439 U1, JP59133439 U, JP59133439 A2, JP58109922 U1, JP58109922 U, JP58109922 A2, JP47022064 U1, JP47022064 U, JP47022064 A2, JP2000128168 A2, GB2168313 A1, GB1453131 A, GB1358427 A, EP2070826 A1, EP1813540 A1, EP1577222 A1, EP09169559, EP0737624 A2, CH527102 A3, CH527102 A, CH527102, CA138290 S, CA138289 S,

Forward Citations: WO15070051, WO13172783, USD787683, USD781149, USD776529, USD751922, USD711228, USD694108, USD672235, USD669781, USD658980, US9637269, US9598211, US9468964, US9365334, US9162794, US9016504, US8939311, US2017036809, US2015353229, US2014008367, EP2580135, EP2580135, CN105873830, CN102837866, CA138290, CA138289,

Abstract:
Source: US2011056945A A full aperture beverage end has a center panel, a countersink surrounding the centre panel, a main score arranged in proximity to the countersink to define a removable aperture panel and a vent score. The beverage end is adapted for use with products that are pressurized to over 30 psi (200 kPa) when opened, and during opening the vent score is adapted to sever first, controlling the pressure differential between the external surface and internal surface of the centre panel, thereby allowing the main score to tear in a controlled and reliable manner.

0) US2014263333A – VENTED BEVERAGE CAN AND CAN END

9) Family number: 57415484 (US2014263333A) © PatBase

Title: VENTED BEVERAGE CAN AND CAN END

Priority: US20130075622 20131108 US20130782316P 20130314 WO2014US22524 20140310

Family:

Publication number	Publication date	Application number	Application date
CA2905292 AA	20150910	CA20142905292	20140310
CN105473455 A	20160406	CN201480028150	20140310
EP2969794 A1	20160120	EP20140719891	20140310
JP2016518984 T2	20160630	JP20160500987T	20140310
MX2015012259 A1	20151201	MX20150012259	20140310
TH158320 A	20161129	TH20151005228	20140310
US2014263333 AA	20140918	US20130075622	20131108
US9403628 BB	20160802	US20130075622	20131108
WO14159208 A1	20141002	WO2014US22524	20140310

Probable Assignee: CROWN PACKAGING TECH INC

Assignee(s):(std)**:** CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC

Assignee(s): DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; DOSHI VIVEK ; FIELDS BRIAN ; KEANE BRENDAN

Inventor(s):(std)**:** DOSHI VIVEK ; FIELDS BRIAN ; KEANE BRENDA ; KEANE BRENDAN

Inventor(s): VIVEK DOSHI ; BRENDA KEANE ; BRIAN FIELDS

Agent(s): GOWLING LAFLEUR HENDERSON LLP; LIND ROBERT; INO SARI; NISHIJIMA TAKAKI; MATSUSHITA MITSURU; KURASAWA ICHIRO; DESHIMARU TAKESHI; BAKER AND HOSTETLER LLP; FULLMER HAROLD H

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/44 B65D17/00 B65D17/32 B65D51/16 (Advanced/Invention); B65D17/00 B65D17/32 (Core/Invention)

CPC: B65D51/1683 B65D17/165 B65D51/1672 B65D2517/0014 B65D2517/0062 B65D2517/0082 B65D2517/0094

US class: 1/1 220/271

Classification Explorer

Cited documents: WO9325445 A1, WO13067398 A2, WO12018549 A1, WO08023983 A1, USD437223 S1, USD322222 S1, US8678221 BB, US8196767 BB, US8186532 BB, US8011527 BB, US7975884 BB, US7942285 BB, US7748563 BB, US7513383 BB, US7000797 BB, US6951293 BB, US6763964 BA, US6715629 BB, US6494332 BA, US6354453 BA, US6234338 BA, US6079583 A, US6015060 A, US5860553 A, US5695085 A, US5692636 A, US5653355 A, US5555992 A, US5494184 A, US5397014 A, US5375729 A, US5307947 A, US5285919 A, US5224618 A, US5131555 A, US5011037 A, US4367996 A, US4136797 A, US4134517 A, US4014455 A, US3967754 A, US3964632 A, US3869063 A, US3838788 A, US3795340 A, US3782586 A, US3741432 A, US3441169 A, US3215305 A, US2014054290 AA, US2013270269 AA, US2013118133 AA, US2013075401 AA, US2013037543 AA, US2012205378 AA, US2012199587 AA, US2011266281 AA, US2011108552 AA, US2011056946 AA, US2010294771 AA, US2010219187 AA, US2010018976 AA, US2009206083 AA, US2009090716 AA, US2009065518 AA, US2009039091 AA, US2009039090 AA, US2009001081 AA, US2007215621 AA, US2007051727 AA, US2007029334 AA, US2006016815 AA, US2004211786 AA, US2004159665 AA, US2004144787 AA, US2004140314 AA, US2004056032 AA, US2003192889 AA, US2003075544 AA, US2003038134 AA, US2001021281 AA, JP60150922 A2, JP5504318 T2, JP5310248 A2, JP5178345 A2,

JP2007320617 A2, JP2006347580 A2, JP2006160303 A2, JP2005343557 A2, JP2004042982 A2, JP2003285837 A2, JP2001018960 A2, JP2000185757 A2, JP11348979 A2, JP1035662, JP10035662 A2, GB2320008 A1, EP2601109 A1, EP2113293 A2, CN302188734 A, CN102951343 A, CN101910010 A, CN101244771 A, CA2280461 AA,

Forward Citations: WO16018977, WO15138413, USD762114, USD750488, USD749415, US9446879, US9233784, US9162795, US2013118133,

Abstract:
Source: US2014263333A A beverage can end has a vent that includes a button. The vent is actuated by downward force of a pull tab that is transmitted to the vent score through the button.

0) US2003038134A – SMALL OPENING BEVERAGE CAN END ADAPTED FOR RECE...

10) Family number: 23483250 (US2003038134A) © PatBase

Title: SMALL OPENING BEVERAGE CAN END ADAPTED FOR RECEIVING A STRAW

Priority: US20010757362 20010108 WO2002US00464 20020107

Family:

Publication number	Publication date	Application number	Application date
AU2002234229 AA	20020716	AU20020234229	20020107
AU2002234229 BB	20060316	AU20020234229	20020107
EP1358111 A1	20031105	EP20020701029	20020107
US2003038134 AA	20030227	US20010757362	20010108
WO02053468 A1	20020711	WO2002US00464	20020107

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP ; CHASTEEN HOWARD C ; LEE GENE

Inventor(s):(std)**:** CHASTEEN HOWARD C ; LEE GENE

Inventor(s): GENE LEE ; HOWARD C CHASTEEN

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZM ZW

International class (IPC 8–9): A47G19/22 B65D17/34 (Advanced/Invention); A47G19/22 B65D17/28 (Core/Invention)

International class (IPC 1–7): A47G19/22 B65D17/34

CPC: B65D17/165 B65D2517/0049 B65D2517/0094

European class: B65D17/16B2 L65D517/00Y6A L65D517/00Y8B

US class: 220/269 220/27 220/270 220/705

Classification Explorer

Cited documents: US6443324 BA, US6079583 A, US5819973 A, US5695085 A, US5253779 A, US4289251 A, US4205760 A, US4084721 A, US3757989 A, US3438578 A, US3349955 A, US3307737 A, US2003213803 AA, US2003192889 AA,

Forward Citations: USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD691039, USD624356, US9446879, US9403628, US9233784, US9162795, US9051081, US8678221, US8567158, US7735674, US2006124654,

Abstract:
Source: US2003038134A A beverage can end is provided herein which has a small opening preferably centrally disposed which is adapted for receiving a straw. Preferably, the small opening end is opened with a conventional pull tab, but which establishes a vent area positioned adjacent the small opening end which provides sufficient venting during use of the straw. It is further preferred that the pull tab be slightly elevated with rounded corners to provide a smooth, easily accessible pulling surface for the user of the beverage can.

0) US2008217361A – BEVERAGE DISPENSING ASSEMBLY

11) Family number: 42146328 (US2008217361A) © PatBase

Title: BEVERAGE DISPENSING ASSEMBLY

Priority: EP20080731650 20080307 US20070684326 20070309 US20080014875 20080116 US20080040062 20080229 US20080088776P 20080814 US20080264023 20081103 US20090414199 20090330 US20090496051 20090701 US20090556719 20090910 WO2008US56187 20080307 US20110276488 20111019

Family:

Publication number	Publication date	Application number	Application date
AU2008226514 AA	20080918	AU20080226514	20080307
AU2008226514 BB	20140522	AU20080226514	20080307
CA2680379 AA	20080918	CA20082680379	20080307
DE602008024579 D1	20130718	DE200860024579T	20080307
EP2129596 A1	20091209	EP20080731650	20080307
EP2129596 A4	20110601	EP20080731650	20080307
EP2129596 B1	20130515	EP20080731650	20080307
EP2628692 A1	20130821	EP20130002516	20080307
ES2423707 T3	20130923	ES20080731650T	20080307
HK1138820 A1	20140214	HK20100105656	20100609
US2008217361 AA	20080911	US20070684326	20070309
US2008217362 AA	20080911	US20080014875	20080116
US2008217363 AA	20080911	US20080040062	20080229
US2009140006 AA	20090604	US20080264023	20081103
US2009261129 AA	20091022	US20090414199	20090330
US2009302038 AA	20091210	US20090496051	20090701
US2009321443 AA	20091231	US20090556719	20090910
US2012031932 AA	20120209	US20110276488	20111019
US8070023 BB	20111206	US20070684326	20070309
WO08112535 A1	20080918	WO2008US56187	20080307
ZA200906918 A	20100630	ZA20090006918	20091005

Probable Assignee: ON TAP LLC

Assignee(s):(std): VITANTONIO MARC L ; SPIRK JOHN W ; TAPPER JAY ; REPLOGLE JOHN ; RABBITT WILLIAM E ; SPIRK JR JOHN W ; TAGGART JEFFREY S ; VISY PACKAGING PTY LTD ; BROWN PATRICK W ; KALMAN JEFFREY M ; NOTTINGHAM JOHN R ; NOTTINGHAM JOHN W ; ON TAP LLC

Assignee(s): ON TAP LLC CLEVELAND HEIGHTS

Inventor(s):(std): BROWN PATRICK W ; KALMAN JEFFREY M ; NOTTINGHAM JOHN R ; NOTTINGHAM JOHN W ; RABBITT WILLIAM E ; REPLOGLE JOHN ; SPIRK JOHN W ; SPIRK JR JOHN W ; TAGGART JEFFREY S ; TAPPER JAY ; VITANTONIO MARC L

Inventor(s): VITANTONIO MARC L SOUTH RUSSELL ; WILLIAM E RABBITT ; TAPPER JAY PALM BEACH GARDENS ; SPIRK JOHN W GATES MILLS ; REPLOGLE JOHN RALEIGH ; RABBITT WILLIAM E SOLON ; NOTTINGHAM JOHN W BRATENAHL ; NOTTINGHAM JOHN R BRATENAHL ; KALMAN JEFFREY M CLEVELAND HEIGHTS ; MARC L VITANTONIO ; JAY TAPPER ; JEFFREY M KALMAN ; JOHN R NOTTINGHAM ; JOHN REPLOGLE ; JOHN W NOTTINGHAM ; JOHN W SPIRK

Agent(s): SPRUSON AND FERGUSON; DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; MUELLER BORE AND PARTNER PATENTANWAELTE PARTG MBB; MUELLER BORE AND PARTNER PATENTANWAELTE; MUELLER BORE AND PARTNER PATENTANWAELTE; PONS ANGEL; FAY SHARPE LLP; WITHROW JONATHAN A

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC

LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65B3/04 B65B43/40 B65B7/00 B65B7/28 B65D41/04 B65D43/26 B65D5/72 B65D83/00 B67D1/00 B67D1/04 B67D1/12 B67D1/16 B67D5/00 B67D5/06 B67D5/60 B67D7/06 B67D7/78 B67D99/00 (Advanced/Invention);
B67D1/00 (Advanced/Non–invention);
B65B43/40 B65B7/28 B65D41/04 B65D43/00 B65D5/72 B65D83/00 B67D1/00 B67D7/78 B67D99/00 (Core/Invention);
B65D B67D (Subclass/Invention)

CPC: B67D1/0418 B67D1/1252 B67D1/1281 B67C3/30 B67D1/0082 B67D1/0802 B67D1/0805 B67D2001/0089 B67D2001/0824 B67D1/0801 B67D1/0804 B67D1/0809 B67D1/0857 B67D1/0858 B67D1/0869 B67D1/0891 B67D1/1256 B67D1/14 B67D1/1466 B67D2210/00036

European class: B67C3/30 B67D1/00H8B B67D1/04B2 B67D1/08A12 B67D1/08A2 B67D1/08A4 B67D1/08A6 B67D1/08D B67D1/08D2 B67D1/08D4 B67D1/08K2 B67D1/12G B67D1/12H B67D1/12M2B B67D1/14 B67D1/14B6B L67D1/00H8M4 L67D1/08A L67D1/08A34B L67D210/00D2B2

US class: 141/1 141/1S 215/329 215/329S 215/44 215/44S 220/200 220/260 220/707 220/707S 222/108 222/394 222/396 222/399 222/400.7 222/464.1 222/464.100S 222/5 222/571 222/571S 222/5S 53/492 53/492S

Classification Explorer

Cited documents: WO9839246 A1, WO08155494 A1, WO08066376 A1, WO08048098 A1, WO08044923 A1, WO0067628 A1, US7631783 BA, US7188644 BB, US6824017 BB, US6814383 BB, US6651852 BB, US6616011 BB, US6553779 BA, US6546737 BA, US653516 A, US6530235 BB, US6516839 BA, US6502725 BA, US6502406 BB, US6484903 BB, US6386403 BB, US6367665 BA, US6360923 BA, US6059152 A, US5979715 A, US5979713 A, US5404901 A, US5329975 A, US5260081 A, US5129552 A, US5126552 A, US5110012 A, US5104003 A, US5096095 A, US5022565 A, US4984717 A, US4982876 A, US4940169 A, US4923095 A, US4919310 A, US4785972 A, US4765512 A, US4735348 A, US4735248 A, US4676287 A, US4632276 A, US4520950 A, US4437588 A, US4402429 A, US4383399 A, US4264019 A, US4222972 A, US4120425 A, US4116362 A, US4032047 A, US3907174 A, US3843172 A, US3822716 A, US3613954 A, US3583289 A, US3561649 A, US3434632 A, US3403820 A, US3373907 A, US3343726 A, US3327899 A, US3325053 A, US3317089 A, US3294298 A, US3294289 A, US325053 A, US3244326 A, US3239102 A, US3233779 A, US3211350 A, US3200991 A, US3195779 A, US3161327 A, US3150799 A, US3006515 A, US2917906 A, US2842293 A, US2774521 A, US2547052 A, US2319517 A, US2222247 A, US2165684 A, US2159729 A, US2125248 A, US2115052 A, US2051981 A, US2010199606 AA, US2007000941 AA, US2006169725 AA, US2005269361 AA, US2005268985 AA, US2005263578 AA, US2003205285 AA, US2003038145 AA, US1932147 A, US1835541 A, FR2693437 A1, DE98965 A,

Forward Citations: WO14205477, WO12167333, WO12062609, WO12056018, WO11130795, WO11079151, USD645694, USD645288, USD645287, USD617136, US9670048, US9604236, US9469518, US9434595, US9352949, US9248416, US9221666, US9205387, US9181021, US9126816, US9038923, US8950636, US8919669, US8906438, US8820556, US8757439, US8469242, US8464766, US8157435, US2015266713, US2015203341, US2015053277, US2014332553, US2014272052, US2014263477, US2014075888, US2013306673, US2013233895, US2013233878, US2013221034, US2013214011, US2013068798, US2013015212, US2013008898, US2012312837, US2012228311, US2011240765, US2011147406, US2011121027, US2011038989, US2011036807, US2011036414, US2010294799, US2010232256, US2010126595, US2010005811, RU2575596, JP2014520042, GB2488717, GB2488717, EP2987767, EP2447208, CN104670706, CN103344391, CN103189304, CN103189304, CN102834184, BE1020003, AU2013328605,

Abstract:
Source: US2008217361A A beverage dispensing assembly that is capable of dispensing controlled or metered portions of a beverage charged with a gas fits onto a shelf in a conventional household refrigerator. The beverage dispensing assembly includes a sealed disposable container assembly that contains the beverage and a dispensing assembly that cooperates with the container assembly to selectively unseal the container assembly and dispense controlled portions of the beverage from the container assembly.

0) US2009095752A – TAB AND CAN END EMPLOYING THE SAME

12) Family number: 43144837 (US2009095752A) © PatBase

Title: TAB AND CAN END EMPLOYING THE SAME

Priority: EP20080838560 20081006 US20070978882P 20071010 US20080246087 20081006 WO2008US78903 20081006 US20160371847 20161207

Family:

Publication number	Publication date	Application number	Application date
CN101821168 A	20100901	CN200880111033	20081006
CN101821168 B	20120815	CN200880111033	20081006
DE602008018261 D1	20121018	DE200860018261T	20081006
EP2197755 A1	20100623	EP20080838560	20081006
EP2197755 A4	20110323	EP20080838560	20081006
EP2197755 B1	20120822	EP20080838560	20081006
JP2011500463 T2	20110106	JP20100528965T	20081006
JP5628676 B2	20141119	JP20100528965T	20081006
US2009095752 AA	20090416	US20080246087	20081006
US2017101214 AA	20170413	US20160371847	20161207
WO09048832 A1	20090416	WO2008US78903	20081006

Probable Assignee: STOLLE MACHINERY CO LLC

Assignee(s):(std)**:** MCELDOWNEY CRAIG ALLEN ; MITCHELL MARK RICHARD ; STOLLE MACHINERY CO LLC

Assignee(s): STOLLE MACHINERY CO LLC CENTENNIAL ; STOLLE MACHINERY COMPANY LLC ; STOLLE MACHINERY CO

Inventor(s):(std)**:** ALLEN MCELDOWNEY CRAIG ; MCELDOWNEY CRAIG ALLEN ; MITCHELL MARK RICHARD ; RICHARD MITCHELL MARK

Agent(s): LEINWEBER AND ZIMMERMANN; PARRY SIMON JAMES; ECKERT SEAMANS CHERIN AND MELLOTT; COFFIELD GRANT E ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/34 B65D17/347 B65D17/353 (Advanced/Invention); B65D17/28 (Core/Invention)

CPC: B65D17/165 B65D2517/0014 B65D2517/0062

European class: B65D17/16B2 L65D517/00Y2C L65D517/00Y7A1A

US class: 220/272

Classification Explorer

Cited documents: WO9424006 A1, WO07021388 A1, USD523332 S1, US6443324 BA, US6244456 BA, US6129230 A, US5647499 A, US4880137 A, US4372462 A, US4276993 A, US4211335 A, US4183445 A, US3977561 A, US3499573 A, US2007039961 AA, US2005006388 AA, JPS51132366 U, JP6156488 A2, JP51132366 U1, JP51132366 U, JP2009544539 T2, JP2009515777 T2, JP11105870 A2, GB2459387 A1,

Forward Citations: WO16021434, WO13022592, WO12017840, US9573724, US9016504, US2011147382, JP2014527003, CN105764627, CN104703886, CN102069936,

Abstract:
Source: US2009095752A A tab is provided to facilitate opening of a can end. The tab has a nose portion located at a first end of the tab and a lift portion located at a second end of the tab opposite the nose portion. A rivet receiving portion is located proximate to the nose portion, and includes a rivet hole. A flange extends rearwardly from the lift portion of the tab to define a gap. The gap provides increased space between the underside of the flange and the exterior of the container end, thereby facilitating opening of the container end.

0) US2002158071A – BEVERAGE CAN END WITH OUTWARDLY EXTENDING REINF...

13) Family number: 28276180 (US2002158071A) © PatBase

Title: BEVERAGE CAN END WITH OUTWARDLY EXTENDING REINFORCING BEAD

Priority: US20010271629P 20010226 US20020084267 20020225 WO2002US05933 20020225

Family:

Publication number	Publication date	Application number	Application date
AU2002252126 AA	20020912	AU20020252126	20020225
BRPI0207838 A	20040622	BR2002PI07838	20020225
CN1500051 A	20040526	CN20028007621	20020225
EP1385747 A1	20040204	EP20020721183	20020225
JP2004524229 T2	20040812	JP20020567614T	20020225
MXPA03007728 A1	20040316	MX2003PA07728	20020225
PL363684 A1	20041129	PL20020363684	20020225
RU2003129643 A	20050327	RU20030129643	20020225
US2002158071 AA	20021031	US20020084267	20020225
WO02068281 A1	20020906	WO2002US05933	20020225
YU67303 A	20041125	YU20030000673	20020225

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP ; CHASTEEN HOWARD C ; JACOBER MARK A

Inventor(s):(std)**:** CHASTEEN HOWARD ; CHASTEEN HOWARD C ; CHASTEEN HOWARD CO ; CHASTEEN HOWARD CURTIS ; HOWARD CO CHASTEEN ; JACOBER MARK ; JACOBER MARK A ; MARK A JACOBER

Inventor(s): HOWARD CURTIS CHASTEEN

Agent(s): ASHURST AUSTRALIA

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW

International class (IPC 8–9): B21D51/26 B21D51/30 B21D51/44 B65D1/16 B65D6/30 B65D8/04 B65D8/06 B65D8/12 B65D8/20 (Advanced/Invention)

International class (IPC 1–7): B21D51/26 B21D51/30 B21D51/44 B65D1/16 B65D6/30 B65D8/04 B65D8/06

CPC: B65D7/36 B65D17/08 B65D17/165

European class: B65D17/08 B65D17/16B2 B65D7/36

US class: 220/269 220/619 220/619S

Classification Explorer

Cited documents: US6428261 BA, US6158608 A, US6102243 A, US5878906 A, US5636761 A, US5346087 A, US4361246 A, US4077538 A, US3891117 A, US3630408 A,

Forward Citations: WO13057250, WO07005564, WO07005564, USD787952, USD698668, USD672235, USD658980, USD640141, US9540137, US9371152, US8973780, US8931660, US8875936, US8789721, US8727169, US8708188, US8534490, US8505765, US8328492, US8313004, US8235244, US8205477, US8167123, US8104319, US8052005, US8011527, US7938290, US7743635, US7644833, US7556168, US7506779, US7350392, US7174762, US7004345, US6915553, US6772900, US2016122068, US2012125935, US2011174646, US2011100854, US2009269169, US2009266824, US2009200321, US2009039091, US2008257900, US2008050207, US2006096994, US2005006388, US2004200838, US2004159697, US2003001788, JP2012135804, JP2012091190, JP2009500175, EP2165940, EP2165940, EP1907150, CN104024116, CN104024116, CN103282138, AU2012324816,

Abstract:
Source: US2002158071A The present invention discloses a beverage can end having an outwardly concave reinforcing bead with an upper lip which extends outwardly beyond a substantially vertical plane defined by a downwardly extending chuck wall.

0) US2013098925A – CAN END HAVING AN ANNULAR RIB

14) Family number: 53536887 (US2013098925A) © PatBase

Title:	CAN END HAVING AN ANNULAR RIB
Priority:	US20110549797P 20111021 US20120656358 20121019

Family:

Publication number	Publication date	Application number	Application date
US2013098925 AA	20130425	US20120656358	20121019

Probable Assignee:	CROWN PACKAGING TECHNOLOGY INC
Assignee(s):(std):	CROWN PACKAGING TECHNOLOGY INC
Assignee(s):	DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS
Inventor(s):(std):	DUNWOODY PAUL ROBERT
International class (IPC 8–9):	B21D51/26 B65D8/00 (Advanced/Invention)
CPC:	B21D51/44 B65D2517/0062 B65D17/165
US class:	220/604 413/1 413/69
Classification Explorer	
Cited documents:	US2014252011 AA, US2010006571 AA, US2007007294 AA, US2006096994 AA, US2003042258 AA,

Abstract:
Source: US2013098925A A can end includes an annular rib that may be inclines. Some embodiments of the bead form a teardrop shape. The bead of other embodiments are open. A combination beverage can end and can body, and the tooling and method for forming the can end are provided.

15) Family number: 28256000 (US2001019058A) © PatBase

Title: Cover mountable to beverage container and mounting method and apparatus thereof

Priority: DE20001018685 20000414 KR19990029106U 19991222 KR19990035332 19990825 KR19990051022 19991117 KR19990058534 19991217 KR20000002006 20000125 KR20000005570 20000229 KR20000005571 20000229 US20010853810 20010511 US20000534203 20000324 US20010853815 20010511 KR20000002006U 20000125 KR20000005570U 20000229 KR20000005571U 20000229 US20020062166 20020131 WO2000KR00304 20000404

Family:

Publication number	Publication date	Application number	Application date
AU200036819 A5	20010319	AU20000036819	20000404
DE10018685 A1	20010607	DE20001018685	20000414
DE10018685 C2	20030618	DE20001018685	20000414
DE10066012 C2	20030710	DE20001066012	20000414
DE10066014 C2	20030703	DE20001066014	20000414
JP2001072113 A2	20010321	JP20000090328	20000329
KR100353681 B1	20020919	KR19990058534	19991217
KR19990083877 A	19991206	KR19990035332	19990825
KR20000006983 A	20000207	KR19990051022	19991117
KR20000017810 A	20000406	KR19990058534	19991217
KR200183702 Y1	20000601	KR19990029106U	19991222
KR200195208 Y1	20000901	KR20000005570U	20000229
KR200195209 Y1	20000901	KR20000005571U	20000229
KR200202465 Y1	20001115	KR20000002006U	20000125
US2001019058 AA	20010906	US20010853815	20010511
US2001040163 AA	20011115	US20010853810	20010511
US2002070219 AA	20020613	US20020062166	20020131
US6386814 BB	20020514	US20010853810	20010511
US6390749 BB	20020521	US20010853815	20010511
WO0114218 A1	20010301	WO2000KR00304	20000404

Probable Assignee: KANGSAN TECHNOLOGIES LTD

Assignee(s):(std)**:** CONIC KOREA INC ; KANG SAN TECHNOLOGIES LTD ; KANG SAN TECHNOLOGY LTD ; KANGSAN TECHNOLOGIES LTD

Assignee(s): KANGSAN TECHNOLOGIES LTD SEOUL SOUL

Inventor(s):(std)**:** SONG JONG HOON ; SONG JONGHOON

Inventor(s): JONG HOON SONG ; SONG IK SEON

Agent(s): SUZUKI SATORU

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT KE KG KP KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

International class (IPC 8–9): B21D51/38 B65B7/28 B65D17/00 B65D17/28 B65D17/50 B65D41/62 B65D43/00 B65D51/00 B65D51/02 B65D51/24 B65D77/20 (Advanced/Invention); B21D51/38 B65B7/28 B65D17/00 B65D17/28 B65D17/50 B65D43/00 B65D51/24 (Advanced/Non–invention); B21D51/38 B65D17/00 B65D43/00 (Core/Invention)

International class (IPC 1–7): A47G19/22 B21D51/26 B21D51/38 B21D51/44 B65B61/18 B65B7/28 B65D17/00 B65D17/50 B65D43/00 B65D43/02 B65D51/02 B65D51/20 B65D51/22 B65D51/24 B65D77/20

CPC: B65D17/165 B65D51/007 B65D2517/0013 B65D2517/0025 B65D2517/004 B65D2517/0041 B65D2517/0098

European class: B65D17/16B2 B65D51/00F L65D517/00Y2B L65D517/00Y3B L65D517/00Y5D L65D517/00Y5D1 L65D517/00Y9

US class: 220/253 220/253S 220/254.4 220/254.400P 220/257.2 220/257.200S 220/258 220/258.2 220/258.200P 220/258.200S 220/258.5 220/258.500S 220/716 220/716S 220/730 220/730S 413/12 413/13 413/13S 413/14 413/2 413/45 413/47 413/47S 413/52 413/52S 413/53 413/54 413/66 413/78 53/133.2 53/133.200S 53/139.5 53/410 53/412 53/412S

Classification Explorer

Cited documents: US5893489 A, US5720412 A, US5707196 A, US5692616 A, US5421472 A, US5269432 A, US5147057 A, US5142769 A, US5131554 A, US5119311 A, US5102002 A, US5071019 A, US4938379 A, US4927048 A, US4880136 A, US4852763 A, US4717039 A, US4681238 A, US4213537 A, US4205759 A, US4166424 A, US4136629 A, US4092940 A, US4026226 A, GB547229 A,

Forward Citations: WO17027727, WO15152592, WO15109349, WO13020706, WO12010258, WO12007496, WO09001984, WO07053277, WO02085628, USD787952, USD672235, USD658980, USD654791, USD653538, USD632562, USD578392, USD500343, US8998028, US8881940, US8875926, US8708188, US8622238, US8579148, US8534490, US8201706, US7914640, US7475787, US7025224, US2014251997, US2013240535, US2012312815, US2011100854, US2010065573, US2009057314, US2009026201, US2008230544, US2008197618, US2007138187, US2007095847, US2006281965, US2006163251, US2006102629, US2005211708, US2004065662, NL2004639, KR200454700, JP2008543692, GB2441602, FR2853124, EP2557050, EP2502838, EP2409925, CN103287703, BE1018936,

Abstract:
Source: US2001019058A Disclosed is a cover mountable to a beverage container and mounting method and apparatus thereof. The container cover detachably mountable to an upper surface of a beverage container comprises a body which is formed to have substantially a disc−shaped configuration. The body is partly cut away from an edge toward a center thereof thereby to define a beverage discharging opening which has a predetermined width and a predetermined contour. The beverage discharging opening is capable of being selectively communicated with a discharging hole of the beverage container as the body is rotated. An inner end of the beverage discharging opening is delimited by a rotation guiding part which has a predetermined curvature to guide rotation of the body. The body has a straw insertion hole which is defined therein at a predetermined location to have a predetermined diameter in a manner such that a straw can be inserted therethrough. The body further has an advertisement surface which has a predetermined area in a manner such that an advertising design, letters, and so forth can be printed or an attachment can be affixed thereon.

0) US4137246A – FLUORINATED AROMATIC POLYENES

16) Family number: 31135280 (US4137246A) © PatBase

Title: Fluorinated aromatic polyenes

Priority:

CA19790331353 19790709
US19720809738 19720624
US19760632028 19761114
US19790096362 19791121
US19770809738 19770624
US19820363706 19820330
US19810277569 19810625
US19800206197 19801112
DE19873736513 19871028
EP19790102232 19790703
US19790037803 19790510
US19790037798 19790510
US19760722939 19760913
US19820354331 19820303
US19810278224 19810629
GB19870026760 19871116
US19750632028 19751114
US19780936466 19780824
US19780952416 19781018
US19860936466 19861125
US19870121043 19871116
US19800149389 19800513

Family:

Publication number	Publication date	Application number	Application date
AT2064 E	19830115	AT19790102232T	19790703
AU197950265 A1	19800228	AU19790050265	19790824
AU530952 B2	19830804	AU19790050265	19790824
CA1123442 A1	19820511	CA19790331353	19790709
CH624373 A	19810731	CH19760014093	19761109
DE2651979 A1	19770526	DE19762651979	19761115
DE2651979 C2	19851031	DE19762651979	19761115
DE2964350 D1	19830127	DE19792964350	19790703
DE3736513 A1	19880601	DE19873736513	19871028
DE3736513 C2	19910307	DE19873736513	19871028
DE3744956 C2	19930729	DE19873744956	19871028
DK352779 A	19800331	DK19790003527	19790823
EP0009539 A1	19800416	EP19790102232	19790703
EP0009539 B1	19821222	EP19790102232	19790703
FR2331331 A1	19770610	FR19760034154	19761112
FR2331331 B1	19790629	FR19760034154	19761112
GB1563732 A	19800326	GB19760047205	19761112
GB2197610 A1	19880525	GB19870026760	19871116
GB2197610 B2	19910731	GB19870026760	19871116
GB2237526 A1	19910508	GB19900026460	19901205
GB2237526 B2	19910724	GB19900026460	19901205
GB8726760 A0	19871223	GB19870026760	19871116
GB9026460 A0	19910123	GB19900026460	19901205
IE48809 B	19850529	IE19790001614	19790823
IE791614 L	19800224	IE19790001614	19790823
IL58064 A0	19791230	IL19790058064	19790817
IL58064 A1	19841031	IL19790058064	19790817
JP1391635 C3	19870723	JP19760135451	19761112
JP1448178 C3	19880711	JP19790106124	19790822
JP52065239 A2	19770530	JP19760135451	19761112
JP55031090 A2	19800305	JP19790106124	19790822
JP61060062 B4	19861219	JP19760135451	19761112
JP62052732 B4	19871106	JP19790106124	19790822
NZ191345 A	19840706	NZ19790191345	19790817
PH16422 A	19831003	PH19790022942	19790822
PH17473 A	19840829	PH19800024253	19800708
US4137246 A	19790130	US19770809738	19770624

US4169100 A	19790925	US19780952416	19781018	
US4171318 A	19791016	US19780936466	19780824	
US4201727 A	19800506	US19790037798	19790510	
US4231944 A	19801104	US19790037803	19790510	
US4266073 A	19810505	US19790096362	19791121	
US4299995 A	19811110	US19800149389	19800513	
US4321209 A	19820323	US19800206197	19801112	
US4335248 A	19820615	US19810278224	19810629	
US4338253 A	19820706	US19810277569	19810625	
US4375563 A	19830301	US19820363706	19820330	
US4395575 A	19830726	US19820354331	19820303	
US4723882 A	19880209	US19860936466	19861125	
US4799846 A	19890124	US19870121043	19871116	
ZA7904334 A	19800827	ZA19790004334	19790817	

Probable Assignee: F HOFFMANN LA ROCHE AG

Assignee(s):(std)**:** HOFFMANN LA ROCHE ; HOFFMANN LA ROCH CO F AG ; MINSTER MACHINE CO ; MINI MACHINE CO ; SPARAMEDICA AG ; HOFFMANN LA ROCHE LTD ; HOFFMANN LA ROCHE F AND CO AG

Assignee(s): F HOFFMANN LA ROCHE AND CO AG ; HOFFMANN LA ROCHE AND CO F ; HOFFMANN LA ROCHE F ; F HOFFMANN LA ROCHE AND CO AKTIENGESELLSCHAFT ; HOFFMANN LA ROCHE ET CIE SA ; FHOFFMANN LA ROCHE AND CO AG ; HOFFMANN LA ROCHE LIMITED ; HOFFMANN LA8 F ROCHE AND CO A G ; THE MINSTER MACHINE COMPANY ; MINSTER MACHINE CO A CORP OF OHIO ; SPARAMEDICA A G ; PAWSON BEVERLY A ; HOFFMANN LA8 F ROCHE AND CO AG ; MINISTER MACHINE CO ; MINSTER MACHINE THE COMPANY ; THE MINSTER MACHINE CO MINSTER OHIO US ; THE MINSTER MACHINE CO ; HOFFMANN LA ROCHE AND CO AG F ; HOFFMANN LA ROCHE INC ; F HOFFMANN LA ROCHE AND CO AG BASEL CH ; CHAN KA KONG ; EFU HOFUMAN RA ROSHU UNTO CO AG ; F HOFFMANN LA ROCH CO AG ; F HOFFMANN LA ROCHE AG ; F HOFFMANN LA ROCHE AND CO ; F HOFFMANN LA ROCHE AND CO A G

Inventor(s):(std)**:** PAWSON BA ; KA KONG CHAN ET BEVERLY ANN PAWSON ; WISSMAN TERRY L ; SCHOCKMAN ROBERT L ; PAWSON BEVERLY ANN ; PAWSON BEVERLY A ; PAWSON B A ; PAWSON B ; KAAKON CHIYAN ; KAAKON CHAN ; KA KONG CHAN ; CHAN KA KONG ; CHAN K K ; BEVERLY ANN PAWSON ; BEVERLY ANN PANSON ; BEBARII AN POOSON ; BEBARII AN HOOSON ; BEBARII AN BOOSON

Inventor(s): ANN PAWSON BEVERLY ; CHAN KA KONG HOPATCONG N J ; PAWSON BEVERLY ANN MONTCLAIR N J ; L SCHOCKMAN ROBERT ; L WISSMAN TERRY ; ROBERT L SCHOCKMAN ; SCHOCKMAN ROBERT L ST HENRY OHIO US ; TERRY L WISSMAN ; WISSMAN TERRY L NEW BREMEN OHIO US

Agent(s): ARTHUR S CAVE AND CO; GOWLING LAFLEUR HENDERSON LLP; REINHOLD COHN AND PARTNERS

Designated states: AT BE CH DE FR GB IT LU NL SE

International class (IPC 8–9): A61K31/045 A61K31/075 A61K31/085 A61K31/11 A61K31/165 A61K31/19 A61K31/20 A61K31/215 A61K31/22 A61K31/34 A61K31/341 A61K31/35 A61K31/38 A61K31/381 A61K31/445 A61K31/535 A61K31/54 A61P17/00 A61P35/00 B21D51/38 C07C231/00 C07C231/02 C07C233/11 C07C233/65 C07C235/34 C07C235/46 C07C27/00 C07C29/147 C07C33/48 C07C41/00 C07C41/16 C07C41/26 C07C41/48 C07C43/176 C07C43/178 C07C43/20 C07C43/225 C07C43/23 C07C43/315 C07C45/00 C07C45/26 C07C45/29 C07C45/31 C07C45/41 C07C45/45 C07C45/51 C07C47/20 C07C47/24 C07C47/273 C07C47/277 C07C49/255 C07C51/00 C07C57/60 C07C59/58 C07C59/64 C07C67/00 C07C69/025 C07C69/65 C07C69/734 C07D307/12 C07D307/16 C07D307/38 C07D307/42 C07D307/54 C07D309/12 C07D333/06 C07D333/16 C07D333/22 C07D333/24 (Advanced/Invention);
A61K31/045 A61K31/075 A61K31/11 A61K31/165 A61K31/34 A61K31/341 A61K31/38 A61K31/381 A61P35/00 C07C231/00 C07C27/00 C07C41/00 C07C45/00 C07C47/20 C07C51/00 C07C67/00 (Advanced/Non-invention);
A61K31/045 A61K31/075 A61K31/11 A61K31/165 A61K31/185 A61K31/21 A61K31/34 A61K31/341 A61K31/38 A61K31/381 A61P35/00 B21D51/38 C07C231/00 C07C233/00 C07C235/00 C07C27/00 C07C29/00 C07C33/00 C07C41/00 C07C43/00 C07C45/00 C07C47/20 C07C51/00 C07C57/00 C07C59/00 C07C67/00 C07C69/00 C07D307/00 C07D333/00 (Core/Invention)

International class (IPC 1–7): A01N9/24 A61K31/00 A61K31/035 A61K31/045 A61K31/05 A61K31/075 A61K31/08 A61K31/085 A61K31/09 A61K31/11 A61K31/16 A61K31/165 A61K31/19 A61K31/20 A61K31/21 A61K31/215 A61K31/22 A61K31/23 A61K31/325 A61K31/34 A61K31/35 A61K31/38 A61K31/445 A61K31/535 A61K31/54 B21D24/04 B21D51/44 B30B15/04 B30B9/00 C07C103 C07C103/00 C07C103/133 C07C103/175 C07C103/20 C07C103/26 C07C103/58 C07C103/76 C07C121/50 C07C125 C07C177/00 C07C33 C07C33/06 C07C33/10 C07C33/40 C07C33/46 C07C33/48 C07C43 C07C43/02 C07C43/164 C07C43/17 C07C43/176 C07C43/20 C07C43/225 C07C43/23 C07C43/28 C07C47 C07C47/20 C07C47/232 C07C47/238 C07C47/24 C07C47/26 C07C47/263 C07C47/273 C07C47/277 C07C47/48 C07C47/52 C07C47/55 C07C47/56 C07C49/248 C07C49/44 C07C49/84 C07C57 C07C57/42 C07C57/60 C07C59 C07C59/00 C07C59/64 C07C63 C07C63/52 C07C63/60 C07C65/02 C07C67/343 C07C69 C07C69/02 C07C69/025 C07C69/62 C07C69/65 C07C69/734 C07C69/76 C07D295/16 C07D307 C07D307/12 C07D307/16 C07D307/38 C07D307/42 C07D307/46 C07D307/54 C07D309/12 C07D333 C07D333/06 C07D333/16 C07D333/22 C07D333/24 C07F9/54 C09F5/00 C09F7/00 C09F7/06 C11C3/00

CPC: C07C45/26 C07C45/31 C07C49/255 C07D309/12 B21D51/383 C07C45/515 C07C45/68 C07F9/4006 C07F9/4015 C07F9/4056 C07F9/5442 Y10S514/859 Y10S514/863 Y10S514/96 Y10S514/962 C07C41/18 C07C45/29 C07C41/48 C07C45/41 C07C59/58 C07D307/12 C07D307/16 C07D333/16 C07D307/42 C07C29/147 C07C33/483 C07C41/26 C07C43/178 C07C43/225 C07C43/23 C07C45/292 C07C45/298 C07C45/45 C07C47/277 C07C59/64 C07D307/54 C07D333/22 C07D333/24

European class: 124B69/66AB 124B69/66C 124B69/66C4C 124B69/66X 124B69/76 124BC4B3C 124BC5E2C 124BC5E3C 124BD122X122+69/66AB 124BG12B3G2B3K 12Q31A2C B21D51/38B C07C29/147 C07C33/48A C07C41/16 C07C41/26 C07C41/48 C07C43/178 C07C43/225 C07C43/23 C07C43/315 C07C45/26 C07C45/29 C07C45/29C C07C45/29M C07C45/31 C07C45/41 C07C45/45 C07C45/51B6 C07C45/68 C07C47/277 C07C49/255 C07C59/58 C07C59/64 C07D307/12 C07D307/16 C07D307/42 C07D307/54 C07D309/12 C07D333/16 C07D333/22 C07D333/24 C07F9/40A1 C07F9/40A2 C07F9/40A7 C07F9/54A4

US class: 198/803.15 198/803.8 260/347.4 260/404 260/408 413/14 413/62 413/66 514/859 514/863 514/960 514/962 544/176 544/58.4 546/216 546/226 546/301 548/540 549/496 549/497 549/498 549/499 549/76 549/77 549/78 549/79 554/120 554/153 554/157 554/218 554/220 554/62 560/104 560/105 560/174 560/183 560/184 560/185 560/254 560/55 560/60 560/62 562/465 562/472 562/567 562/586 568/308 568/398 568/415 568/425 568/433 568/442 568/484 568/495 568/592 568/649 568/654 568/655 568/663 568/812 568/816 72/31.01 72/361 72/405 72/405.02 72/405.09 72/422

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Forward Citations: WO8906575, WO14144284, WO14144284, WO05016001, USRE37947, USRE35530, US9550224, US9486421, US9393610, US8777000, US8420698, US8138225, US8026280, US7902259, US7858664, US7842727, US7838463, US7464576, US7370507, US7344347, US7314953, US7312247, US7305861, US7114248, US7107671, US6887030, US6817083, US6808351, US6802683, US6695132, US6533518, US6506917, US6495719, US6405853, US6405430, US6186061, US6070713, US6022179, US5876171, US5705167, US5704754, US5534261, US5511920, US5508456, US5484052, US5344300, US5292885, US5286895, US5282531, US5182934, US5158410, US5151001, US5102278, US5096052, US5017072, US4964325, US4946028, US4936729, US4932822, US4854799, US4806558, US4751027, US4539154, US4476056, US4395575, US4335248, US2015151350, US2013140135, US2011315522, US2010116775, US2008267736, US2008083255, US2008025820, US2006010953, US2005138984, US2005049145, US2004167184, US2004020042, US2003230179, US2003192175, US2003125306, US2003083521, US2003053890, JP62120393, JP2016517353, FR2719041, EP0941830, EP0941779, EP0679628, EP0611060, EP0111124, EP0009539, EP0002533, EA11453, EA011453, DE3321662, DE102007018778, CN103084505,

Abstract:
Source: US4137246A Compounds represented by the formula wherein R1, R2 and R3 are lower alkyl, R4 is lower alkoxy, R6 and R8 are methyl or trifluoro methyl, R9 is formyl, hydroxymethyl, alkoxymethyl, alkanoyloxymethyl,

carboxyl, alkoxycarbonyl, lower alkenoxycarbonyl, lower alkynoxycarbonyl, carbamoyl, mono(lower alkyl)−carbamoyl, di(lower alkyl)carbamoyl or N−heterocyclylcarbonyl, R5, R7, R10, R11 R12 and R13 are hydrogen or fluorine with the proviso that at least one of R5, R7, R10, R11, R12 or R13 is fluorine or at least one of R6 or R8 is trifluoro methyl, OR PHARMACEUTICALLY ACCEPTABLE SALTS THEREOF USEFUL AS ANTITUMOR AGENTS ARE DISCLOSED.

0) US2012205378A – CAN END

17) Family number: 51723873 (US2012205378A) © PatBase

Title: CAN END

Priority: US20110026599 20110214 WO2012US24969 20120214

Family:

Publication number	Publication date	Application number	Application date
EP2675717 A1	20131225	EP20120706381	20120214
US2012205378 AA	20120816	US20110026599	20110214
US8783495 BB	20140722	US20110026599	20110214
WO12112487 A1	20120823	WO2012US24969	20120214

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** FORREST RANDALL G ; REXAM BEVERAGE CAN CO

Assignee(s): REXAM BEVERAGE CAN COMPANY

Inventor(s):(std)**:** FORREST RANDALL G

Agent(s): LANE CATHAL MICHAEL; UNGARETTI AND HARRIS LLP; KLOBUCHAR PETER M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/32 B65D17/34 (Advanced/Invention)

CPC: B65D17/24 B65D2517/0016 B65D17/165 B65D2517/0014 B65D2517/0061 B65D2517/0062 B65D2517/007 B65D2517/0074

European class: B65D17/16B2 L65D517/00Y2C L65D517/00Y7A1 L65D517/00Y7A1A L65D517/00Y7B1 L65D517/00Y7C

US class: 220/269 220/619 220/623

Classification Explorer

Cited documents: WO02051710 A1, WO0058161 A1, US7556168 BB, US7000797 BB, US6761281 BB, US6715629 BB, US6575684 BB, US6460723 BB, US6330954 BA, US6164480 A, US6161717 A, US5964366 A, US5715964 A, US5375729 A, US4804721 A, US4372462 A, US4210257 A, US4084721 A, US3967752 A, US3941277 A, US2004099664 AA, US2003111469 AA, US2003080132 AA, US2002113069 AA, US2001002671 AA,

Forward Citations: USD762114, USD751920, USD751919, USD750488, USD749415, USD731887, USD727725, USD720238, USD715647, USD715144, USD693698, US9580203, US9446879, US9403628, US9233784, US9033175, EP3071491,

Abstract:
Source: US2012205378A A can end for a beverage container has a circumferential curl positioned about a longitudinal axis, a wall extending downwardly from the curl, a strengthening member joined to the wall, and a center panel joined to the strengthening member and extending radially inwardly relative to longitudinal axis. A rivet is located at a center position of the center panel. A frangible score has terminal ends located on a common side of the rivet. The terminal ends are separated by a non−frangible hinge segment. A displaceable tear panel is defined by the frangible score and the non−frangible hinge segment. A non−detachable tab has a nose and a lift end. The nose overlies a portion of the displaceable tear panel. A deboss groove is located on the public side of the center panel and extends downwardly in a direction towards the product side. The deboss groove is located adjacent the score line.

0) US2016228938A – CAN END PRODUCTION

18) Family number: 58753636 (US2016228938A) © PatBase

Title: CAN END PRODUCTION

Priority: EP20130185408 20130920 WO2014EP69735 20140916

Family:

Publication number	Publication date	Application number	Application date
AR097712 AA	20160413	AR2014P103489	20140919
AU2014323166 AA	20150326	AU20140323166	20140916
CA2924726 AA	20160318	CA20142924726	20140916
CN105555431 A	20160504	CN201480051598	20140916
CO16091901 A2	20160510	CO20160091901	20160412
CO7600662 A2	20160510	CO20160091901	20160412
DE602013007564 D1	20160630	DE201360007564T	20130920
EP2851140 A1	20150325	EP20130185408	20130920
EP2851140 B1	20160518	EP20130185408	20130920
ES2586705 T3	20161018	ES20130185408T	20130920
HU030495 T2	20170529	HU20130185408T	20130920
JP2016531758 T2	20161013	JP20160543382T	20140916
MX2016003488 A1	20160906	MX20160003488	20140916
US2016228938 AA	20160811	US20140022774	20140916
WO15040032 A1	20150326	WO2014EP69735	20140916

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC ; GAILLY NOE JACQUES FRANCOIS

Assignee(s): CROWN PACKAGING TECHNOLOGY INC ALSIP

Inventor(s):(std)**:** GAILLY NOE JACQUES FRANCOIS ; NOE JACQUES FRANCOIS GAILLY

Agent(s): MARKS AND CLERK AUSTRALIA; FB RICE; MARKS AND CLERK; JOSE ANDRES RINCON USCATEGUI; MARKS AND CLERK LUXEMBOURG LLP; LIND ROBERT; CARPINTERO MARIO

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D22/22 B21D51/38 B21D51/44 (Advanced/Invention)

CPC: B21D51/44 B21D22/22 B21D51/38

US class: 413/8

Classification Explorer

Cited documents: WO0160546 A1, US6223931 BA, US5823040 A, EP2353746 A1, EP0518613 A1, DE29906170 U1, CN85104434 A, CN101060948 A,

Abstract:
Source: US2016228938A A method of making a can end by forming a can end shell in a shell press; and converting the shell into a can end. The step of forming the can end shell comprises pressing sheet metal into an end shell with a bead feature in the radially outer circumference of its centre panel. In a subsequent can end conversion operation material from the bead feature is used to set final geometry of the converted can end.

0) US4564119A – ALUMINUM CAN END

19) Family number: 4939622 (US4564119A) © PatBase

Title:	Aluminum can end
Priority:	US19840679383 19841207

Family:

Publication number	Publication date	Application number	Application date
US4564119 A	19860114	US19840679383	19841207

Probable Assignee:	NIPPON LIGHT METAL CO
Assignee(s):(std):	NIPPON LIGHT METAL CO
Assignee(s):	NIPPON LIGHT METAL CO LTD
Inventor(s):(std):	KOHMURA SHIGERU ; SAITOH HISAO ; SAITOH SHIGENORI ; SUGIYAMA KEIICHI ; TSUGE MITSUO
International class (IPC 8–9):	B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)
International class (IPC 1–7):	B65D17/34
CPC:	B65D17/165
European class:	B65D17/16B2
US class:	220/270
Classification Explorer	
Cited documents:	US4403710 A, US3980201 A,
Forward Citations:	WO14150673, USD751922, US8789721, US6666933, US5683006, US5405039, US2015034658, US2009200321, US2006029358, EP0262767, EP0261776, CN105492330,

Abstract:
Source: US4564119A The can end is formed with a circular severing score for severing the area defined thereby from the can end by pulling a manipulating tab secured within the area defined by the score at a position adjacent thereto. In order to increase the pressure resisting strength against the internal pressure caused by the content in the can, the can end is made from a thin aluminum alloy sheet having the yield strength in the range of 24–29 kgf/mm2 as well as the elongation equal to or greater than 6 percent, while the aperture rate defined by the ratio of the area formed within the score with respect to the total area of the can end is made at least equal to or greater than 60 percent so that the pressure resisting strength is kept substantially at least 5 kgf/cm2. In order to more advantageously maintain the high pressure resisting strength of the can, score is located at a position spaced from the inner periphery of the bottom of the frustoconical portion at least a distance equal to or greater than 1 mm inwardly of the area of the can end, to make the inner radius of curvature of the corner formed around the inner periphery of the bottom of the frustoconical portion equal to or less than 0.5 mm, and to make the taper angle of the frustoconical portion of the can end equal to or less than 10 DEG. An auxiliary score having a score residual smaller than that of the score for severing the area defined thereby from the can end may be formed outwardly or inwardly of the score for severing. The score residual of the can end may be preferably increased from the thinnest portion adjacent to the position where the tab is provided while a plurality of elongated ridges or grooves may be formed within the area defined by the score substantially perpendicular to the line passing through the tab and the center of the can end in order to avoid rapid severing of the area defined by the score from the can end so as to prevent spilling of the content out of the can when the can end is being opened. All these measures are effective to most advantageously enhance the pressure resisting strength of the can end.

0) US2002050493A – CAN WITH PEELABLY BONDED CLOSURE

20) Family number: 28200465 (US2002050493A) © PatBase

Title: Can with peelably bonded closure

Priority: US19990247999 19990210 US20000603004 20000626 US20010905310 20010713 US20020150683 20020517 WO2001CA00954 20010626 WO2002CA01076 20020715

Family:

Publication number	Publication date	Application number	Application date
AU2001268880 AA	20020108	AU20010268880	20010626
AU2002317644 AA	20030129	AU20020317644	20020715
BRPI0111965 A	20030701	BR2001PI11965	20010626
CA2412518 AA	20021217	CA20012412518	20010626
CA2453552 AA	20040113	CA20022453552	20020715
EP1294613 A1	20030326	EP20010947084	20010626
JP2004501838 T2	20040122	JP20020505271T	20010626
US2002050493 AA	20020502	US20010905310	20010713
US2003062370 AA	20030403	US20020150683	20020517
WO0200512 A1	20020103	WO2001CA00954	20010626
WO03006329 A2	20030123	WO2002CA01076	20020715
WO03006329 A3	20030410	WO2002CA01076	20020715

Probable Assignee: ALCAN INT LTD

Assignee(s):(std)**:** FURNEAUX ROBIN C ; HAMSTRA PETER ; MOULTON JAMES D ; SCOTT TOM E ; SMITH CHRISTOPHER ROBERT ; ALCAN INT LTD ; BALL MELVILLE DOUGLAS

Assignee(s): ALCAN INT ; CITICORP NORTH AMERICA INC ; ALCAN INTERNATIONAL LIMITED ; NOVELIS CORP ; NOVELIS INC

Inventor(s):(std)**:** FURNEAUX ROBIN C ; HAMSTRA PETER ; BALL MELVILLE DOUGLAS ; MOULTON JAMES D ; SCOTT TOM E ; SMITH CHRISTOPHER ROBERT

Inventor(s): TOM E SCOTT ; PETER HAMSTRA ; ROBIN C FURNEAUX ; CHRISTOPHER ROBERT SMITH ; JAMES D MOULTON ; MELVILLE DOUGLAS BALL

Agent(s): KIRBY EADES GALE BAKER

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

International class (IPC 8–9): B65D17/50 B65D21/02 B65D77/20 B65D8/02 (Advanced/Invention)

International class (IPC 1–7): B65D17/50 B65D21/02 B65D41/00 B65D77/20 B65D8/02

CPC: B65D17/502 B65D2517/0013 B65D2517/0056 B65D2517/0062 B65D2517/5008 B65D2517/5032 B65D2517/5054 B65D2517/5083

European class: B65D17/50A1 L65D517/00Y2B L65D517/00Y6Z L65D517/00Y7A1A L65D517/50M10B L65D517/50M2 L65D517/50P1B1 L65D517/50Q5

US class: 220/359.2 220/359.200P 220/359.4 220/359.400S

Classification Explorer

Cited documents: WO0200512 A1, US5829623 A, US5752614 A, US5725120 A, US5692633 A, US5069355 A, US4680917 A, US4650088 A, US4324343 A, US4176760 A, US4165015 A, US3889844 A, US3547305 A, US3312368 A, US2002050493 AA, GB2244254 A1, GB2067159 A1, DE8228681 U, DE2948069 C2,

Forward Citations: WO07045385, WO06061411, WO06061411, WO06053457, WO06053457, WO05019047, WO05019047, WO05005277, WO04035400, WO03051725, WO03016155, WO03006329, WO03006329, USD672235, USD658980, US9540137, US9517866, US8973780,

US8931656, US8875936, US8833585, US8807374, US8746489, US8708188, US8534490, US8336726, US8336725, US8328492, US8240501, US8240498, US8123451, US8104319, US8052005, US8011527, US7918359, US7644833, US7556168, US7350392, US7224580, US7174762, US7004345, US6772900, US2015298831, US2013206766, US2013161324, US2013008910, US2011233227, US2011215099, US2011127268, US2011100854, US2010294768, US2009269169, US2009266824, US2009200302, US2009179033, US2009173737, US2009039091, US2008257900, US2008110887, US2008050207, US2007262079, US2007068943, US2006238965, US2006214430, US2006151503, US2006096994, US2004211780, US2004076721, US2004065663, US2003062370, MY138331, KR100984710, JP2008522828, JP2008213945, JP2007502751, FR2873276, EP1834885, EP1819501, EP1638860, EP1425225, EA8460, EA008460, CH702587, AU2004266755, AU2004255572, AU2004255572,

Abstract:
Source: US2002050493A A metal can for holding a carbonated or otherwise pressurized beverage or the like, having a rigid metal lid formed with an eccentrically disposed, upwardly projecting frustoconical annular flange defining an aperture of average diameter between about 0.625 inch and about 1 inch, and a flexible metal foil closure extending over the aperture and peelably bonded by a heat seal to the sloping outer surface of the flange.

0) US2012031056A – CONTAINER END CLOSURE WITH OPTIONAL SECONDARY V...

21) Family number: 50609953 (US2012031056A) © PatBase

Title: CONTAINER END CLOSURE WITH OPTIONAL SECONDARY VENT OPENING

Priority: EP20110815019 20110722 US20100851979 20100806 US20130066457 20131029 US20150812146 20150729 US20140039020P 20140819 US20150829887 20150819 WO2011US44940 20110722 WO2015US45839 20150819

Family:

Publication number	Publication date	Application number	Application date
AU2011286291 AA	20120209	AU20110286291	20110722
AU2011286291 BB	20140417	AU20110286291	20110722
BR112013002863 A2	20160607	BR20131102863	20110722
CA2806879 AA	20130128	CA20112806879	20110722
CA2806879 C	20150428	CA20112806879	20110722
CA2958649 AA	20170217	CA20152958649	20150819
CN103140423 A	20130605	CN201180046744	20110722
CN103140423 B	20150826	CN201180046744	20110722
DE602011031540 D1	20161201	DE201160031540T	20110722
DK2601109 T3	20170109	DK20110815019T	20110722
EP2601109 A1	20130612	EP20110815019	20110722
EP2601109 A4	20140430	EP20110815019	20110722
EP2601109 B1	20161019	EP20110815019	20110722
ES2601810 T3	20170216	ES20110815019T	20110722
MX2013001492 A1	20130501	MX20130001492	20110722
MX337754 B	20160317	MX20130001492	20110722
PL2601109 T3	20170331	PL20110815019T	20110722
RU2013109931 A	20140920	RU20130109931	20110722
RU2573284 C2	20160120	RU20130109931	20110722
US2012031056 AA	20120209	US20100851979	20100806
US2014096491 AA	20140410	US20130066457	20131029
US2015329238 AA	20151119	US20150812146	20150729
US2016052667 AA	20160225	US20150829887	20150819
US8567158 BB	20131029	US20100851979	20100806
US9446879 BB	20160920	US20130066457	20131029
WO12018549 A1	20120209	WO2011US44940	20110722
WO16028860 A1	20160225	WO2015US45839	20150819
WO17019269 A1	20170202	WO2016US41243	20160707

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP ; BOL CORP ; CHASTEEN HOWARD C ; JACOBER MARK A

Assignee(s): GATEWOOD ERIK E ; BALL BROOMFIELD CORP ; BOL KORPOREJSHN

Inventor(s):(std)**:** CHESTIN KHOVARD K ; DZHEKOBER MARK A ; GATEWOOD ERIK E ; JACOBER MARK ; JACOBER MARK A ; CHASTEEN HOWARD ; CHASTEEN HOWARD C

Inventor(s): CHASTEEN HOWARD C WESTMINSTER ; JACOBER MARK A ARVADA ; MARK A JACOBER ; HOWARD C CHASTEEN

Agent(s): MADDERNS PATENT AND TRADE MARK ATTORNEYS; GOODWIN MCKAY; GOODWIN LAW; PARLEE MCLAWS LLP; SMART AND BIGGAR; HANNKE BITTNER AND PARTNER PATENT U RECHTSANWAELTE MBB; HANNKE CHRISTIAN; ISERN JORGE; SHERIDAN ROSS PC; KUGLER BRUCE A; KUGLER BRUCE A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE

GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65B43/39 B65B69/00 B65D17/00 B65D17/34 B65D25/00 B65D47/04 B65D47/32 B65D51/16 B67B7/00 (Advanced/Invention); B65D51/16 (Advanced/Non–invention)

CPC: B65D47/32 B65B69/00 B65D17/165 B65D2517/0014 B65D2517/002 B65D2517/0094 B65D2517/0007 B65D2517/0082 B65D2517/0089 B65D2517/0092 B65D17/24

European class: B65D17/16B2 L65D517/00Y2C L65D517/00Y2Z L65D517/00Y7B1 L65D517/00Y8B

US class: 1/1 220/229 220/269 220/269S 220/272 53/381.1 53/382.1 53/492 53/492P

Classification Explorer

Cited documents: WO9742088, WO9722531, WO9602432 A1, WO9413544, WO14150180 A1, WO13102595, WO13102594, WO12143322, WO12018549, WO11053776, WO08057207, WO08023983, WO08008892, WO0146025 A1, WO0056613, USRE30349 E, USRE28910 E, USD704555, USD691039, USD653944 S1, USD653538, USD650278, USD650277, USD650276, USD623963, USD612724, USD602776, USD600116, USD579771, USD559680 S1, USD535561, USD476889, USD448666, USD434983 S1, USD424438, USD415026, USD402887 S1, USD397296, USD396635, USD387987, USD385192 S1, USD382481, USD365274 S1, USD353769 S1, USD267633 S1, USD259403 S1, USD255425 S1, USD255424 S1, USD239256 S1, USD239255 S1, USD238659 S1, USD238150 S1, USD208591 S1, US9561888 BB, US9233784 BB, US9033174, US8998015, US8950619, US8939306, US8893913, US8646643, US8627979, US8573432, US8567158 BB, US8397935, US8336726, US8245866 BB, US8177092, US8152016, US8136689, US7975884 BB, US7918359, US7891519, US7748557 BB, US7516869, US7513383 BB, US7506779 BB, US7100789 BB, US7096759 BB, US7000797 BB, US6837093 BB, US6761281 BB, US6715629 BB, US6499329 BA, US6375029 BB, US6354453 BA, US6330954, US6202880, US6161717, US6145866 A, US6131763, US6079583 A, US6059137, US6050440, US6024239 A, US5979697 A, US5975327 A, US5964366, US5938390 A, US5911331 A, US5860553 A, US5819973, US5715964, US5713481 A, US5711448 A, US5695085, US5692636 A, US5683006 A, US5655678 A, US5653355, US5555992 A, US5494184, US5456378 A, US5405039 A, US5397014 A, US5375729 A, US5307947 A, US5285919 A, US5248053 A, US5224618 A, US5219257 A, US5131555 A, US5129541 A, US5065882 A, US5064087 A, US5011037 A, US5007554 A, US4994009 A, US4930658 A, US4901880 A, US4701090 A, US4576306 A, US4465204 A, US4448325 A, US4438865 A, US4416389 A, US4402421 A, US4397403 A, US4361251 A, US4320850 A, US4318494 A, US4305523 A, US4289251 A, US4280427 A, US4276993 A, US4267938 A, US4257529 A, US4252247 A, US4244490 A, US4244489 A, US4213538 A, US4210257 A, US4205760 A, US4196823 A, US4184607 A, US4148410 A, US4146149 A, US4128186 A, US4105133 A, US4084721 A, US4073403 A, US4062471 A, US4061243 A, US4054228 A, US4051976 A, US4039100 A, US4032034 A, US4030631 A, US4024981 A, US3982657 A, US3970212 A, US3908856 A, US3881630 A, US3877604 A, US3856184 A, US3836038 A, US3833144 A, US3826401 A, US3794206 A, US3779417 A, US3765208 A, US3762597 A, US3744667 A, US3741432 A, US3731836 A, US3618815 A, US3499573 A, US3446389 A, US3441169 A, US3370169 A, US3362569 A, US3326406 A, US3307737 A, US3262611 A, US3246791 A, US3227304 A, US3215305 A, US3169678 A, US2272111 A, US2160429 A, US2016052667 AA, US2015367984 AA, US2015329238 AA, US2015158627, US2015136776, US2015053681, US2015034648, US2014374419, US2014367382, US2014325943, US2014263333, US2014263327, US2014158685, US2014110408, US2014103044, US2014096491 AA, US2014069924, US2014054332, US2014054290, US2013299496, US2013292382, US2013270269, US2013270267, US2013264344, US2013264343 AA, US2013126529 AA, US2013118133 AA, US2013075401, US2013037543, US2013037542, US2012312815, US2012260613, US2012228296, US2012205378, US2012199587, US2012199586 AA, US2012048870 AA, US2012031056 AA, US2012012584, US2011303672, US2011297679, US2011266281 AA, US2011253719 AA, US2011240645, US2011226636, US2011168714, US2011108552, US2011056946 AA, US2010326281, US2010294771 AA, US2010251731, US2010224511, US2010044383 AA, US2010018976, US2010000997, US2009269169, US2009266824, US2009206083 AA, US2009200305 AA, US2009194536, US2009173740, US2009057315 AA, US2009039091, US2009039090, US2009001081, US2008302793, US2008110888, US2008011786 AA, US2007257035, US2007215621, US2007175896, US2007138178 AA, US2007068943, US2007045318 AA, US2007039961, US2006196875, US2006049196, US2005224497, US2005115976, US2005077316 AA, US2004211786, US2004188440, US2004144787 AA, US2004140309, US2004056032, US2003192889 AA, US2003111469 AA, US2003098306 AA, US2003075544, US2003038134 AA,

US2002139800 AA, US2002113069 AA, US2002005408 AA, US1847794 A, NL1023297 C1, NL1023297 A, KR20050059718 A, JP9301364, JP9058681, JP8151043, JP7132937, JP7132936, JP6219448, JP5178345, JP4879759, JP4311452, JP3578797, JP3009188 U, JP2013531590, JP2010215291, JP2009543737, JP2007022541, JP2006069605, JP2005088961, JP2004359339, JP2003285837, JP2001018960, JP10245032, JP10035662, GB2320008, GB2291030, GB2280165 A1, GB2280165, GB1532081, GB1436617, ES2525589, ES2458098, EP2038178, CN201343207 Y, CA2657391, CA2280461 AA,

Forward Citations: WO17019269, WO16028860, WO14150180, WO14149768, WO14031926, WO14031926, USD787952, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD698668, US9446879, US9403628, US9233784, US9181007, US9162795, US9102451, US8893913, US8875926, US2017029165, US2015053681, US2014054290, US2013240535, EP2888173, CN105745156, CN105102332, CN104703886, CN104684813,

Abstract:
Source: US2012031056A The present invention relates to an opening device for a beverage container. More specifically, the invention relates to a metal end closure having a primary opening area and at least one optional secondary vent opening which can be opened with the same pull tab. The primary opening area of the metal end closure may be opened by utilizing a pull tab interconnected to a central panel, the pull tab being adapted for applying a downward force to form a first opening. Subsequently, the pull tab is rotated and the tail end lifted to form a second opening in the end closure.

0) US2014028039A – DISPOSABLE FINGER TONGS FOR HANDLING A FOOD PRO...

22) Family number: 55704776 (US2014028039A) © PatBase

Title: DISPOSABLE FINGER TONGS FOR HANDLING A FOOD PRODUCT

Priority: US20120741052P 20120711 US20120741657P 20120725 US20130939070 20130710 US20120796556P 20121113 US20130848579P 20130107 US20150706426 20150507

Family:

Publication number	Publication date	Application number	Application date
US2014028039 AA	20140130	US20130939070	20130710
US2016157647 AA	20160609	US20150706426	20150507
US9033383 BB	20150519	US20130939070	20130710
US9578982 BB	20170228	US20150706426	20150507
WO16179427 A1	20161110	WO2016US31045	20160505

Probable Assignee: RAMPERSAD KENRICK

Assignee(s):(std)**:** RAMPERSAD KENRICK

Inventor(s):(std)**:** RAMPERSAD KENRICK

Agent(s): ALFRED M; JOHN F; WALKER ALFRED M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9)**:** A41D1/00 A41D13/08 A41D31/02 A47D13/08 A47G21/00 A47G21/10 A47J43/28 A61F13/10 B25B9/02 B65G7/12 (Advanced/Invention)

CPC: A47G21/001 A47J43/283 A61F13/105 A47J43/28 B25B9/02 A47G21/10 A41D2400/52 A41D13/087

US class: 294/25 294/99.2

Classification Explorer

Cited documents: WOUS31045, WO16179427 A1, WO12117248 A2, WO11081402 A2, US9033383 BB, US8261938 BB, US7165270 BB, US7117536 BB, US6425136 BA, US6243868 BA, US5848928 A, US567087 A, US5359840 A, US5280661 A, US4938515 A, US4677697 A, US4476588 A, US4424595 A, US4188055 A, US4038787 A, US3407927 A, US3331626 A, US2244072 A, US2014109284 AA, US2014028039 AA, US2008000011 AA, US2007131706 AA, US2007118947 AA, US2006108240 AA, US2005138736 AA, US2002043810 AA, US1235199 A,

Forward Citations: WO16179427, US9578982,

Abstract:
Source: US2014028039A A combination finger fold holder tong and surface texturizing set includes a set of tongs with finger pockets, whereby the pockets are movable towards and away from each other for grasping an article of food; plus a plurality of adhesively adherable sticker substrates having a first texture imparted side and an opposite adhesive bearing side with a release liner, whereby the texture containing adhesively adherable sticker is placed upon the food engaging surface for manual grasping of articles of food.

0) US2006289549A – EDGE–TEARING TAMPER–EVIDENT CONTAINER

23) Family number: 34029940 (US2006289549A) © PatBase

Title: EDGE–TEARING TAMPER–EVIDENT CONTAINER

Priority: CA20062565664 20061026 US20050166308 20050624 US20090321254 20090120 US20060496215 20060731 US20080065907P 20080215 US20090371888 20090216 US20090512817 20090730

Family:

Publication number	Publication date	Application number	Application date
AU2006236072 AA	20080214	AU20060236072	20061117
AU2006236072 BB	20100325	AU20060236072	20061117
CA2565664 AA	20080131	CA20062565664	20061026
CA2565664 C	20120417	CA20062565664	20061026
DE602005010066 D1	20081113	DE200560010066T	20051031
EP1736417 A1	20061227	EP20050256721	20051031
EP1736417 B1	20081001	EP20050256721	20051031
EP1884478 A1	20080206	EP20060255708	20061106
MXPA06013396 A1	20081008	MX2006PA13396	20061117
US2006289549 AA	20061228	US20060496215	20060731
US2009223619 AA	20090910	US20090321254	20090120
US2009321463 AA	20091231	US20090512817	20090730
US7568589 BB	20090804	US20060496215	20060731
US7712626 BB	20100511	US20090512817	20090730
US7992743 BB	20110809	US20090321254	20090120
US8251249 BA	20120828	US20090371888	20090216

Probable Assignee: PACTIV PACKAGING INC

Assignee(s):(std)**:** PWP IND ; VOVAN TERRY

Assignee(s): UNION BANK OF CALIFORNIA NA ; PWP IND INC ; UNION BANK OF CALIFORNIA NA ADMINISTRATIVE AGENT A ; UNION BANK OF CALIFORNIA NA ADMINISTRATIVE AGENT AS ; PWP IND (CALIFORNIA CORPORATION) ; PWP IND CALIFORNIA CORP ; PWP IND CALIFORNIA CORPORATION ; BANK OF NEW YORK MELLON COLLATERAL AGENT AS ; PACTIV PACKAGING INC

Inventor(s):(std)**:** VOVAN TERRY

Inventor(s): TERRY VOVAN

Agent(s): PHILLIPS ORMONDE FITZPATRICK; SMART AND BIGGAR; HEDLEY NICHOLAS JAMES MATTHEW ET AL; LEON D ROSEN FREILICH HORNBAKER AND ROSEN; KNOBBE MARTENS OLSON AND BEAR LLP; LEON D; BAKER BOTTS LLP

Designated states: AL BA DE FR GB HR IT MK YU

International class(IPC 8–9)**:** B31B49/02 B32B37/00 B65D17/347 B65D17/353 B65D21/02 B65D39/00 B65D41/32 B65D43/02 B65D43/14 B65D43/16 B65D50/02 B65D51/00 B65D55/06 B65D6/28 B65D8/18 (Advanced/Invention); B31B49/00 B32B37/00 B65D17/28 B65D39/00 B65D41/32 B65D43/00 B65D43/02 B65D43/14 B65D50/00 B65D51/00 B65D55/02 (Core/Invention)

CPC: B65D43/021 B65D55/024 B65D2101/0092 B65D2543/00092 B65D2543/00101 B65D2543/00203 B65D2543/00222 B65D2543/00296 B65D2543/00351 B65D2543/0049 B65D2543/00509 B65D2543/00546 B65D2543/0062 B65D2543/00648 B65D2543/00685 B65D2543/00731 B65D2543/00768 B65D2543/00796 B65D2543/00842 B65D2543/0099

European class: B65D43/02S3D B65D55/02F L65D101/00A7 L65D543/00Y10B2 L65D543/00Y1F2C L65D543/00Y1F2D L65D543/00Y1F4C3B L65D543/00Y1G L65D543/00Y1M6 L65D543/00Y20D L65D543/00Y2D L65D543/00Y8D1 L65D543/00Y8D1C L65D543/00Y8D3N L65D543/00Y8S1B2 L65D543/00Y8S1B8 L65D543/00Y8S1D2 L65D543/00Y8S3B10 L65D543/00Y8S3B2 L65D543/00Y8S3D2

US class:

156/69 156/69P 206/228 206/369 206/461 220/23.83 220/23.86 220/266 220/377 220/4.21 220/4.22 220/4.23 220/4.24 220/4.26 220/4.27 220/500 220/520 220/521 220/523 220/751 220/752 220/767 220/789 220/791 220/796 220/826 220/836 220/839 220/839S 220/840 493/52 493/52S

Classification Explorer

Cited documents: WO05009857 A1, USRE36729 E, USD352000 S1, US7311218 BB, US7311218 B1, US7243813 BB, US7243813 B1, US7207457 BB, US7118003 BB, US7118003 B1, US7097058 BB, US7097058 B1, US7073680 BB, US7073680 B1, US7004341 BB, US6926165 BB, US6926165 B1, US6772901 BB, US6772901 B1, US6604645 BA, US6572909 BA, US6564958 BA, US6279774 BA, US6257435 BA, US6168044 BA, US6168044 B1, US6135304 A, US6116501 A, US6000570 A, US5979690 A, US5931332 A, US5897011 A, US5883771 A, US5875913 A, US5842593 A, US5683771 A, US5607075 A, US5604645 A, US5573134 A, US5545375 A, US5528814 A, US5511679 A, US5507406 A, US5507405 A, US5421473 A, US5307948 A, US5287959 A, US5249694 A, US5219087 A, US5219074 A, US5170905 A, US5133470 A, US5129531 A, US5115934 A, US5111954 A, US5111953 A, US5052574 A, US5040695 A, US5027969 A, US5007231 A, US5002198 A, US4998622 A, US4966292 A, US4930656 A, US4890758 A, US4881656 A, US4765463 A, US4759463 A, US4742935 A, US4627550 A, US4535889 A, US4434907 A, US4433793 A, US4113136 A, US4091930 A, US4006839 A, US3773207 A, US36729 A, US3572579 A, US352000 A, US2009206082 AA, US2009057313 AA, US2009021026 AA, US2008185383 AA, US2008163265 AA, US2008021026 AA, US2008006632 AA, US2008000904 AA, US2007202221 AA, US2007196541 AA, US2007138180 AA, US2007138046 AA, US2007108210 AA, US2007062948 AA, US2007012710 AA, US2006289549 AA, US2006289541 AA, US2006278652 AA, US2006266750 AA, US2006261070 AA, US2006255054 AA, US2006201946 AA, US2006163265 AA, US2006060578 AA, US2006006632 AA, US2006000904 AA, US2004134910 AA, US2003160051 AA, US2003052133 AA, GB2257118 A1, FR2819496 A1, FR2691952 A1, EP0752374 A1, DE7816353 U, DE7816353, DE4418935 A1, DE29914659 U1, DE29819718 U1, DE1999083197,

Forward Citations: WO16054297, WO08156921, USD776974, USD746678, USD742222, USD697795, USD686064, USD675517, USD673447, USD646563, USD645737, USD645339, US9656785, US9624009, US9580219, US9546018, US9493277, US9475621, US9409683, US9365331, US9352886, US9278786, US9187209, US9132942, US9120595, US9102446, US9051095, US9016503, US8944270, US8939307, US8939287, US8925755, US8851315, US8833589, US8789695, US8640914, US8608008, US8523000, US8371468, US8360262, US8322555, US8272526, US8251249, US8251242, US8215485, US8146766, US8127961, US8123064, US8083089, US8056750, US8028851, US7992743, US7832586, US7712626, US7681732, US2016355303, US2015329249, US2015136777, US2015060455, US2015060454, US2014224824, US2014106048, US2014061971, US2013233746, US2013220855, US2013043247, US2012241456, US2012005994, US2010224630, US2010181323, US2010155402, US2010102074, US2009321463, US2009223619, US2009211941, US2009206082, US2009120937, US2009090712, US2008277397, US2008000904, US2007045317, GB2497112, GB2483133, GB2483133, EP1801026,

Abstract:
Source: US2006289549A A food container formed from plastic, can be loaded with food and then closed by a clerk, and thereafter cannot be opened without tearing apart first sides (24, 26) of the base (12) and lid (16). The container is formed by a single sheet of plastic that forms a base and lid with second sides (20, 22) that are latched together and with adjacent first sides that are joined by a joint line (30) in the plastic that is creased and that has slits (40). At the joint line, the lid has a projecting lid tab (32) and the base has a projecting base tab (36). A person grasps both tabs, and lifts only the lid tab to tear apart the first sides of the base and lid along the joint line (30). Thereafter, the lid can be easily closed and reopened on the base.

0) US3952912A – CONTAINER WITH ATTACHED CLOSURE

24) Family number: 6653037 (US3952912A) © PatBase

Title: Container with attached closure

Priority: US19720231124 19720302 US19740514069 19741011 US19760744162 19761122 US19740515444 19741017 US19760712839 19760809 US19760717993 19760826

Family:

Publication number	Publication date	Application number	Application date
US3843011 A	19741022	US19720231124	19720302
US3952912 A	19760427	US19740514069	19741011
US3977578 A	19760831	US19740515444	19741017
US4051976 A	19771004	US19760712839	19760809
US4062471 A	19771213	US19760717993	19760826
US4084721 A	19780418	US19760744162	19761122

Probable Assignee: CONTINENTAL GROUP

Assignee(s):(std)**:** CONTINENTAL GROUP ; PERRY DECEASED WALTER MERTON ; PERRY EXECUTRIX BY ELIZABETH D ; PERRY W ; PERRY WALTER MERTON

Assignee(s): PERRY W US ; THE CONTINENTAL GROUP INC

Inventor(s):(std)**:** PERRY WALTER MERTON ; PERRY W ; PERRY EXECUTRIX BY ELIZABETH D ; PERRY DECEASED WALTER MERTON

Inventor(s): PERRY W US

International class (IPC 8–9)**:** B21D51/38 B21D51/44 B65D17/32 B65D17/50 (Advanced/Invention); B21D51/38 B65D17/00 B65D17/28 (Core/Invention)

International class (IPC 1–7)**:** B65D17/00 B65D17/16 B65D17/24 B65D17/32 B65D41/32 B65D43/02 B65D47/10

CPC: B21D51/383 B65D17/16 B65D17/165 B65D17/166 B65D17/503 B65D17/506 B65D2517/0011 B65D2517/0013 B65D2517/0014 B65D2517/0017 B65D2517/002 B65D2517/0062 B65D2517/007 B65D2517/0071 B65D2517/0098 B65D2517/5008 B65D2517/5029 B65D2517/5048 B65D2517/5056 B65D2517/5081 B65D2517/5091 B65D17/161

European class: B21D51/38B B65D17/16 B65D17/16B B65D17/16B2 B65D17/16B2B B65D17/50A2 B65D17/50B L65D517/00Y2A L65D517/00Y2B L65D517/00Y2C L65D517/00Y2E L65D517/00Y2Z L65D517/00Y7A1A L65D517/00Y7B1 L65D517/00Y7B2 L65D517/00Y9 L65D517/50M10A1 L65D517/50M2 L65D517/50P1A1 L65D517/50P2 L65D517/50Q1B L65D517/50Q99

US class: 220/260 220/265 220/268 220/269 220/277 220/359.2 220/47 222/541 222/541.9 222/561

Classification Explorer

Cited documents: US3977561 A, US3967753 A, US3967752 A, US3856184 A, US3843011 A, US3836038 A, US3744667 A, US3744666 A, US3738526 A, US3703979 A, US3446389 A, US2723778 A, US2590437 A, US2320484 A, US2274752 A, US2261117 A, US117510 A,

Forward Citations: WO9714621, WO8907556, WO16132287, WO14003586, WO14003585, WO13018110, WO12112487, WO11117772, WO09051409, WO09051409, WO08104392, WO08051099, WO07147542, WO07056844, WO06010688, WO04113186, WO02070165, WO0183303, WO0146025, WO0105663, WO0105663, WO0069735, WO0056613, WO0037323, USRE42485, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD691039, USD582274, USD582273, USD533452, USD532691, USD532298, USD530610, USD513452, USD509426, USD507485, USD476889, US9592928, US9566634, US9540137, US9446879, US9359108, US9267705, US9233784, US9163653, US9033174, US8998015, US8973780, US8950619, US8875936, US8870012, US8783495, US8733576, US8627979, US8616399, US8567158, US8556104, US8371467, US8328492, US8215513, US8196767, US8104319, US8080770, US8052005, US8011527, US7975884, US7950542, US7812292, US7748563, US7644833, US7594585, US7556168, US7378625, US7350392, US7174762, US7165696, US7112771, US7051896, US7004345, US7000797, US6772900, US6761281, US6748789, US6715629, US6405889, US6354453, US6330954, US6260728, US6244455, US6234336, US6161717,

US6129230, US6079583, US6024239, US5967726, US5931331, US5860553, US5806757, US5715964, US5711448, US5692636, US5566850, US5555992, US5402921, US5375729, US5335808, US5219257, US5129541, US5085348, US5065882, US5064087, US5007231, US4901880, US4801038, US4624386, US4585140, US4446985, US4411370, US4387827, US4372462, US4322016, US4184607, US4155480, US4141464, US4078695, US4078694, US4054228, US4030631, US4024981, US4024980, US3997075, US3977578, US3977561, US3972445, US3967753, US3967752, US3967750, US3935961, US2015353229, US2015176622, US2012043325, US2012031056, US2010269345, US2010213194, US2010200590, US2010163560, US2010065568, US2009269169, US2009266824, US2009206083, US2009090716, US2008257900, US2008073343, US2008050207, US2008011786, US2007284368, US2007108208, US2007108198, US2007108197, US2007108196, US2007102425, US2006163253, US2006096994, US2005199619, US2005199617, US2005051552, US2005006388, US2004211786, US2004211780, US2004200838, US2004065663, US2003213803, US2003080132, US2003042258, US2003038134, US2003001788, JP57196640, JP56056734, JP5414074, JP2011500467, JP2003517974, GB2156772, GB2125762, FR2957898, EP2969799, EP2546159, EP1964784, EP0621195, EP0592550, EP0160626, EP0160626, EP0090809, EP0033449, EP0000091, EA017452, EA015059, DE2707064, AU761490,

Abstract:
Source: US3952912A Improved easy opening means for containers. Especially adapted to those used for liquids, including carbonated beverages, and permitting drinking from the container or pouring out contents. An important feature is attachment of closure to container after opening to avoid litter. Another feature is lift tab for easy opening, and with closure sealed by either a frangible adhesive sealant or by membrane sealing means. Lift tab initiates rupture of sealant, and then is pushed below container top with means to hold tab below opening so there is no interference when drinking from the can. Another closure has a small end for initial pressure release, and then whole closure hinges inwardly. Still another means comprises a slide gate with frangible membrane for sealing and for very easy opening. Optionally a pressure release button is provided to release the internal pressure before pulling the slide gate. An improved forming method for making the opening smaller than the closure where the closure is cut from the ductile metal top material. Partial use of score lines is included. Container top may be of ductile metal or of plastic for some of the designs. Primary objectives are the elimination of separate closure device that would cause litter, closure easier to open than heretofore, low cost, and no danger of a piece coming loose inside container.

0) WO07007102A2 – FANCIFUL ENDS FOR CANS EXTREMITES FANTAISIE PO...

25) Family number: 32258761 (WO07007102A2) © PatBase

Title: FANCIFUL ENDS FOR CANS

Priority: GB20050014343 20050713 GB20060009568 20050713 GB20060009568 20060513

Family:

Publication number	Publication date	Application number	Application date
GB200514343 A0	20050817	GB20050014343	20050713
GB200609568 A0	20060621	GB20060009568	20050713
GB2428659 A1	20070207	GB20050014343	20050713
GB2428659 B2	20071121	GB20050014343	20050713
GB2428668 A1	20070207	GB20060009568	20050713
GB2428668 B2	20080723	GB20060009568	20050713
WO07007102 A2	20070118	WO2006GB02583	20060712
WO07007102 A3	20070503	WO2006GB02583	20060712

Probable Assignee: REXAM BEVERAGE CAN EUROPE LTD

Assignee(s):(std)**:** BONNER ANN ; REXAM BEVERAGE CAN EUROP LTD ; REXAM BEVERAGE CAN EUROPE LTD

Assignee(s): REXAM BEVERAGE CAN EUROPE LIMITED

Inventor(s):(std)**:** BONNER ANN

Inventor(s): ANN BONNER

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/38 B21D51/44 B65D17/28 B65D17/32 B65D17/34 B65D51/24 (Advanced/Invention); B21D51/38 B65D17/28 B65D51/24 (Core/Invention)

CPC: B21D51/38 B65D17/165 B65D2203/00 B65D2517/0014 B65D2517/0052 B65D81/365 B21D51/44 B65D17/16 B21D51/443 B65D51/245

European class: B21D51/38 B21D51/44 B21D51/44B B65D17/16 B65D17/16B2 B65D51/24F B65D81/36D L65D203/00 L65D517/00Y2C L65D517/00Y6B

Classification Explorer

Cited documents: WO9958407 A1, WO9909853 A2, WO05021392 A1, WO0168460 A2, US6659833 BA, US6533518 BA, US6053349 A, US2001011431 AA, JP2002128087 A2, GB2347370 A1,

Forward Citations: WO17027802, WO13158771, WO13049313, WO08125238, US9637267, US9340368, US9278776, US9259913, US9187221, US9186924, US2015034649, DE102012209500, CN103946119,

Abstract:
A can is described having a can body comprising a sidewall and a base and defining an interior region for containing a product. The can includes an end having a center panel. A printing is applied over a substantial area extent of the center panel. In one embodiment, the printing comprising an illustration of head and facial features of a character. In preferred embodiments, the end may further comprise a scored portion in the center panel for defining an opening in the end and a manually manipulable tab secured to the end. The tab forms the nose of the character. The character may include the face and head of a real person, or, alternatively, may depict a fictional character or a cartoon character. Other embodiments are described in the printing takes the form of a sports scene with a ball such as a soccer or golf ball printed within a score portion defining a pour panel.

0) US2005284869A – CAN END

26) Family number: 32524541 (US2005284869A) © PatBase

Title: CAN END

Priority: CA20052510689 20050627 EP20040253845 20040606 EP20040253845 20040626 EP20050105543 20050622

Family:

Publication number	Publication date	Application number	Application date
AT375928 E	20071115	AT20050105543T	20050622
CA2510689 AA	20051226	CA20052510689	20050627
CA2510689 C	20131001	CA20052510689	20050627
DE602005002878 D1	20071129	DE200560002878T	20050622
DE602005002878 T2	20080724	DE200560002878T	20050622
EP1616802 A1	20060118	EP20050105543	20050622
EP1616802 B1	20071017	EP20050105543	20050622
ES2292062 T3	20080301	ES20050105543T	20050622
US2005284869 AA	20051229	US20050166227	20050627
US8177092 BB	20120515	US20050166227	20050627

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING TECHNOLOGY INC ; MILLS GARY H ; MILLS GARY HILAIRE

Assignee(s): DEUTSCHE BANK AG ; DEUTSCHE BANK NEW YORK BRANCH AGENT AG AS ; DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS

Inventor(s):(std)**:** MILLS GARY ; MILLS GARY H ; MILLS GARY HILAIRE

Agent(s): FETHERSTONHAUGH AND CO; VINCENT L RAMIK DILLER RAMIK AND WIGHT; MILES AND STOCKBRIDGE PC; DAVID R; MICHAEL A

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

International class (IPC 8–9)**:** B65D17/00 B65D17/34 B65D17/46 B65D17/52 B65D33/10 B65D43/26 B65D47/24 B65D50/14 B65D51/16 (Advanced/Invention); B65D17/00 B65D17/28 B65D33/06 B65D43/00 B65D47/04 B65D50/00 B65D51/16 (Core/Invention)

International class (IPC 1–7)**:** B65D17/34 B65D43/26 B65D50/14 B65D51/16

CPC: B65D17/163 B65D33/10 B65D47/24 B65D2517/0094 B65D17/165 B65D2517/0092

European class: B65D17/16B1 B65D17/16B2 B65D33/10 B65D47/24 L65D517/00Y8A L65D517/00Y8B

US class: 220/269 220/271 220/272 220/279 220/285

Classification Explorer

Cited documents: US6347720 BA, US5819973 A, US4043479 A, US4030631 A, US4015744 A, US3951299 A, US2894844 A, US2002014489 AA, EP0521642 B1, EP0521642,

Forward Citations: WO13020706, WO11026900, USD762114, USD669781, USD649049, USD647400, USD643718, USD641623, USD641622, USD641239, US9446879, US9359108, US9181007, US9033174, US9016504, US8939308, US7922025, US7721906, US2013240526, US2011056945, US2010163560, US2008173646, US2008067174, US2008067171, FR3021634, EP2878547, EP2557050, CN102625769, CN102625769,

Abstract:
Source: US2005284869A An easy open end for a pressurised food container, having an end panel and a conventional aperture score, surrounding the periphery of an aperture through which the contents of the container may be dispensed. A tab is provided to facilitate easy opening of the aperture. The easy open end also includes a vent score, which is arranged to rupture before the main aperture score, to vent the internal pressure in the container, before the container is opened. The end panel and/or tab also defines a shield to prevent the egress of product from the vent opening, when the vent score is severed.

0) US2014263329A – EASY ACCESS OPENING TAB FOR A CONTAINER END CLO...

27) Family number: 57414894 (US2014263329A) © PatBase

Title: EASY ACCESS OPENING TAB FOR A CONTAINER END CLOSURE

Priority: US20130838478 20130315 WO2014US18860 20140227

Family:

Publication number	Publication date	Application number	Application date
AU2014238112 AA	20140925	AU20140238112	20140227
AU2014238112 BB	20160929	AU20140238112	20140227
CA2900636 AA	20150807	CA20142900636	20140227
CL2015002629 A1	20160415	CL20150002629	20150911
CN105073589 A	20151118	CN201480016018	20140227
EP2969818 A1	20160120	EP20140770051	20140227
EP2969818 A4	20161130	EP20140770051	20140227
GT201500271 A	20170104	GT20150000271	20150910
MX2015013266 A1	20151211	MX20150013266	20140227
RU2015144277 A	20170424	RU20150144277	20140227
US2014263329 AA	20140918	US20130838478	20130315
US9033174 BB	20150519	US20130838478	20130315
WO14149484 A1	20140925	WO2014US18860	20140227

Probable Assignee: BALL CORP

Assignee(s):(std): BALL CORP

Assignee(s): CHASTEEN HOWARD C ; JACOBER MARK A

Inventor(s):(std): CHASTEEN HOWARD C ; JACOBER MARK A

Inventor(s): MARK A JACOBER ; HOWARD C CHASTEEN

Agent(s): MADDERNS PATENT AND TRADE MARK ATTORNEYS; SMART AND BIGGAR; JOHANSSON AND LANGLOIS LTDA; EISENFUEHR SPEISER; SHERIDAN ROSS PC; PEARSON KENDRIA E

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/34 B65D43/26 (Advanced/Invention); B65D43/26 (Advanced/Non–invention)

CPC: B65D17/165 B65D43/26 B65D2517/0014 B65D2517/0073 B65D2517/0062

US class: 220/269 220/270 413/25

Classification Explorer

Cited documents: WO11107558 A1, USD612724 S1, USD602776 S1, USD600116 S1, USD579771 S1, USD419873 S1, USD337521 S1, USD265463 S1, US8196767 BB, US8177092 BB, US7942285 BB, US7926675 BB, US7909196 BB, US7891519 BB, US7617945 BB, US7594585 BA, US7168586 BB, US6164480 A, US6138856 A, US6074736 A, US5813811 A, US5813561 A, US5711448 A, US5680952 A, US5655678 A, US5590993 A, US5335808 A, US5224618 A, US5131555 A, US5129541 A, US4994009 A, US4930658 A, US4530631 A, US4524879 A, US4465204 A, US4266688 A, US4257529 A, US4105134 A, US4093102 A, US4084721 A, US4051976 A, US4030631 A, US4024981 A, US4015744 A, US3986633 A, US3938696 A, US3625392 A, US3554400 A, US3250425 A, US2013043248 AA, US2012193361 AA, US2011308202 AA, US2011253719 AA, US2011139782 AA, US2010326281 AA, US2008197132 AA, US2008099480 AA, US2007108209 AA, US2007108208 AA, US2005284869 AA, US2005224497 AA, US2004056032 AA, US2002108954 AA, JP8000580 U, JP5075935 U1, JP5075935 U, JP2002362553 A2, JP2002145263 A2, JP2000159229 A2,

JP10059362 A2, EP1919786 A1, EP0381888 A1,

Forward Citations: USD762114, USD750488, USD749415, US9446879, US9233784, US2016031613, US2013118133,

Abstract:
Source: US2014263329A An end closure for food and beverage containers is provided. The end closure comprises a central panel portion having a protuberance for facilitating access to and manipulation of a pull tab. Before the food or beverage container is pressurized, the protuberance is substantially flat to improve stacking and conveying of the end closure. After the food or beverage container is filled and pressurized, the protuberance selectively deflects and lifts a tail portion of the pull tab to facilitate access.

0) US5728415A – PRIZE–CONTAINING BEVERAGE CAN

28) Family number: 20408908 (US5728415A) © PatBase

Title: Prize–containing beverage can

Priority: US19950504753 19950719 WO1996US11519 19960711

Family:

Publication number	Publication date	Application number	Application date
AR002881 A1	19980429	AR19960337526	19960718
AR002881 A1	19980429	AR19960103642	19960718
AT185762 E	19991115	AT19960924421T	19960711
AU199664882 A1	19970218	AU19960064882	19960711
AU693383 B2	19980625	AU19960064882	19960711
CA2226992 AA	19980113	CA19962226992	19960711
CA2226992 C	20020917	CA19962226992	19960711
CN1075999 C	20011212	CN19961095600	19960711
CN1190940 A	19980819	CN19961095600	19960711
DE69604807 D1	19991125	DE19966004807	19960711
DE69604807 T2	20000518	DE19966004807T	19960711
EP0839112 A1	19980506	EP19960924421	19960711
EP0839112 B1	19991020	EP19960924421	19960711
ES2137714 T3	19991216	ES19960924421T	19960711
HK1018036 A1	20020524	HK19980112679	19981202
KR19990029061 A	19990415	KR19980700365	19980117
MX9800505 A1	19980531	MX19980000505	19960711
US5728415 A	19980317	US19950504753	19950719
WO9703894 A1	19970206	WO1996US11519	19960711
ZA9606156 A	19970204	ZA19960006156	19960719

Probable Assignee: COCA COLA CO

Assignee(s):(std)**:** COCA COLA CO ; THE COCA COLA COMPANY

Assignee(s): TROSKA GEORG ; THE COCA COLA CO ; THE COCA COLA CO ATLANTA

Inventor(s):(std)**:** GEORG TROSKA ; TROSKA GEORG

Agent(s): PHILLIPS ORMONDE FITZPATRICK; SIM AND MCBURNEY

Designated states: AT AU BE CA CH CN DE DK ES FI FR GB GR IE IT KR LI LU MC MX NL PT SE

International class (IPC 8–9): B65B61/20 B65D1/12 B65D17/28 B65D75/54 B65D77/24 (Advanced/Invention); B65D17/28 B65D77/24 (Advanced/Non–invention); B65D17/28 B65D77/24 (Core/Invention)

International class (IPC 1–7): B65B61/20 B65D B65D1/12 B65D17/28 B65D35/00 B65D75/54 B65D77/24

CPC: B65D17/165 B65D77/24 B65D2517/0052

European class: B65D17/16B2 B65D77/24 L65D517/00Y6B

US class: 206/217 206/457 206/459.1 426/112 426/115 426/123 426/131 426/392 426/394 426/397

Classification Explorer

Cited documents: WO9500414 A1, WO8901750 A1, US5482158 A, US5439103 A, US5172827 A, US5099232 A, US5056681 A, US5056659 A, US5046631 A, US4923084 A, US4923083 A, US4911320 A, US4892187 A, US4826034 A, US4728001 A, US4709829 A, US4690294 A, US4537324 A, US4356927 A, US4305521 A, US4228913 A, US4109817 A, US3656654 A, GB2237789 A1, GB2217677 A1, EP0482776 A1, EP0444385 A1, EP0079673 A2, EP0078789 A2,

Forward Citations:

WO04101377, US8638232, US8508381, US8493229, US8376161, US7772986, US7516869, US7097069, US6880208, US6298990, US6247612, US6123189, US5924596, US2010265086, US2008111685, US2007014898, US2005123657, US2005026533, DE102014017320, CN104555009, AU2004238398,

Abstract:
Source: US5728415A A container assembly for housing liquid products and a prize therein which may be distributed with non−prize bearing containers comprising: a can for containing the liquid product in an interior chamber thereof, and a prize−holding subassembly positioned within the interior chamber for retaining a prize therein. The prize holding subassembly includes a tether for supporting the prize assembly. The tether includes a hair−pin shaped spring portion defining legs, and foot portions extending from those legs. A proximal end of the tether on one of the foot portions engages a gate on the underside of the can closure, and compresses the spring portion into a cocked, position. When the closure is opened, the gate releases the proximal end of the tether so that it may pop up through the open end of the can for gripping by the consumer. A distal end of the tether on the other end of the tether supports a prize container which is manually removable from the can with the tether.

29) Family number: 49884018 (US2011266281A) © PatBase

Title: BEVERAGE CONTAINER LID WITH MOUTH OPENING AND SEPARATE PUSH IN VENT

Priority: US20100769010 20100428 US20140178356 20140212 WO2011US21620 20110119

Family:

Publication number	Publication date	Application number	Application date
CA2834330 AA	20131025	CA20112834330	20110119
US2011266281 AA	20111103	US20100769010	20100428
US2014158685 AA	20140612	US20140178356	20140212
US8678221 BB	20140325	US20100769010	20100428
US9162795 BB	20151020	US20140178356	20140212
WO11136860 A1	20111103	WO2011US21620	20110119

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** COORS BREWING CO ; CROWN PACKAGING TECHNOLOGY INC ; TOMS RAY ALAN ; THIEMANN DANIEL ALAN

Assignee(s): DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; COORS BREWING COMPANY

Inventor(s):(std)**:** THIEMANN DANIEL ALAN ; TOMS RAY ALAN

Agent(s): GOWLING LAFLEUR HENDERSON LLP; BAKER AND HOSTETLER LLP; JOHNSON BRENT P

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65B43/38 B65D17/00 B65D17/34 B65D51/16 (Advanced/Invention); B65D41/32 (Advanced/Non–invention)

CPC: B65D17/165 B65D41/32 B65D2517/0092

European class: B65D17/16B2 L65D517/00Y8A

US class: 1/1 215/370 215/902 220/231 220/254.2 220/254.3 220/254.4 220/266 220/267 220/267.1 220/268 220/270 220/271 220/906 222/478 53/492 53/492S

Classification Explorer

Cited documents: WO9325445 A1, WO14159208 A1, WO13067398 A2, WO12018549 A1, WO08023983 A1, USD437223 S1, USD422211 S1, USD322222 S1, US8678221 BB, US8196767 BB, US8186532 BB, US8011527 BB, US7975884 BB, US7942285 BB, US7748563 BB, US7513383 BB, US7000797 BB, US6951293 BB, US6763964 BA, US6715629 BB, US6494332 BA, US6354453 BA, US6234338 BA, US6079583 A, US6015060 A, US5860553 A, US5695085 A, US5692636 A, US5555992 A, US5492244 A, US5456378 A, US5397014 A, US5375729 A, US5307947 A, US5285919 A, US5224618 A, US5131555 A, US5011037 A, US4367996 A, US4136797 A, US4134517 A, US4014455 A, US3967754 A, US3964632 A, US3869063 A, US3838788 A, US3795340 A, US3782586 A, US3741432 A, US3441169 A, US3215305 A, US2014054290 AA, US2013270269 AA, US2013118133 AA, US2013075401 AA, US2013037543 AA, US2012202378 AA, US2012199587 AA, US2011266281 AA, US2011108552 AA, US2011056946 AA, US2010294771 AA, US2010219187 AA, US2010018976 AA, US2009206083 AA, US2009200306 AA, US2009090716 AA, US2009065518 AA, US2009039091 AA, US2009039090 AA, US2009001081 AA, US2008011786 AA, US2007215621 AA, US2007051727 AA, US2007045318 AA, US2007029334 AA, US2006016815 AA, US2004211786 AA, US2004159665 AA, US2004144787 AA, US2004140314 AA, US2004056032 AA, US2003111469 AA, US2003075544 AA, US2003038134 AA, JP60150922 A2, JP5504318 T2, JP5310248 A2, JP5178345 A2, JP2007320617 A2, JP2006347580 A2, JP2006160303 A2, JP2005343557 A2, JP2004042982 A2, JP2003285837 A2, JP2001018960 A2, JP2000185757 A2, JP11348979 A2, JP1035662, JP10035662 A2, GB2320008 A1, EP2601109 A1,

EP2113293 A2, CN302188734 A, CA2280461 AA,

Forward Citations: WO15138413, WO14159208, WO13067398, USD762114, USD750488, USD749415, USD731887, USD727725, USD715647, USD715144, USD678784, US9446879, US9403628, US9296529, US9238529, US9233784, US9181007, US9162795, US9102451, US9051081, US8893913, US8567158, US2016023821, US2015053681, US2014069924, US2014054290, CN105473455, CN104364164,

Abstract:
Source: US2011266281A A container lid includes a conventional main or pour opening and a vent opening spaced from the main opening. A vent score defines the shape of the vent opening, and a vent panel covers the vent opening. The vent panel has a raised convex shape. The lower surface of the tab handle includes a protruding portion, seen as a concave shaped element when viewed from above the container lid. The protruding portion of the tab handle can be aligned with the vent panel so application of a downward force on the tab handle transfers force to the vent panel and breaks the vent score. The shapes of the vent panel and concave element of the tab handle can be adjusted for selective and controlled force transfer to create the vent opening.

30) Family number: 8380493 (US5258191A) © PatBase

Title: Vacuum–sealed food container having press–on, pry–off closure

Priority: US19910694149 19910501 US19910694903 19910502 US19930015284 19930208 US19920819462 19920110 US19920820445 19920113 US19940256242 19940701 WO1991US03028 19910502 WO1993US00222 19930108

Family:

Publication number	Publication date	Application number	Application date
AU199179019 A1	19921221	AU19910079019	19910502
AU199335824 A1	19930803	AU19930035824	19930108
AU660614 B2	19950706	AU19910079019	19910502
BRPI9107304 A	19940614	BR1991PI07304	19910502
CA2109097 AA	19931022	CA19912109097	19910502
CA2127693 AA	19940708	CA19932127693	19930108
EP0583240 A1	19940223	EP19910910049	19910502
EP0583240 A4	19941109	EP19910910049	19910502
HU67206 A2	19950228	HU19930002978	19910502
HU9302978 A0	19940128	HU19930002978	19910502
JP7500795 T2	19950126	JP19910509396T	19910502
RU93057880 A	19960610	RU19930057880	19931029
US5258191 A	19931102	US19920820445	19920113
US5341949 A	19940830	US19930015284	19930208
US5443853 A	19950822	US19940256242	19940701
WO9219506 A1	19921112	WO1991US03028	19910502
WO9313990 A1	19930722	WO1993US00222	19930108

Probable Assignee: ANCHOR HOCKING PACKAGING CO

Assignee(s):(std): ANCHOR HOCKING CORP ; ANCHOR HOCKING PACKAGING

Assignee(s): ANCHOR HOCKING PACKAGING CO ; ANCHOR HOCKING PACKAGING CO US ; CITICORP NORTH AMERICA INC ; CROWN CORK AND SEAL TECHNOLOGIES ; DEUTSCHE BANK AG ; CITICORP NORTH AMERICA INC COLLATERAL AGENT AS ; DEUTSCHE BANK NEW YORK BRANCH AGENT AG AS ; CHASE MANHATTAN BANK COLLATERAL AGENT AS ; HAYES THOMAS H ; CROWN PACKAGING TECHNOLOGY INC

Inventor(s):(std): HAYES THOMAS H

Inventor(s): HAYES THOMAS H US ; THOMAS H HAYES

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; MACRAE AND CO

Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CI CM CZ DE DK ES FI FR GA GB GN GR HU IE IT JP KP KR LI LK LU MC MG ML MN MR MW NL NO NZ PL PT RO RU SD SE SK SN SU TD TG UA US

International class (IPC 8–9): B65D41/34 B65D41/48 B65D41/52 B65D43/10 B65D51/14 B65D51/24 B65D81/34 (Advanced/Invention); B65D41/32 B65D51/00 (Core/Invention)

International class (IPC 1–7): B65B41/00 B65B55/00 B65D41/16 B65D41/48 B65D41/52 B65D43/00 B65D43/10 B65D53/04 B65D81/34 B65D85/00 H05B6/00

CPC: B65D41/48 B65D51/145 B65D2101/0023 B65D41/3428 B65D51/24 B65D81/3453 B65D2101/0053 B65D2205/00

European class: B65D41/34C1 B65D41/48 B65D51/14B B65D51/24 B65D81/34M1 L65D101/00A3 L65D101/00A3E L65D205/00

US class: 215/253 215/274 215/321 219/734 426/107 426/113 426/234 426/243 426/401 426/405 426/407

Classification Explorer

Cited documents: US5078290 A, US5009324 A, US4993572 A, US4942277 A, US4813561 A, US4721218 A, US4694970 A, US4694969 A, US4509654 A, US4478349 A, US4473163 A, US4448345 A, US4390552 A, US4362253 A, US4171084 A, US4129226 A, US4024976 A, US4018353 A, US3940004 A, US3930589 A, US3913771 A, US3866782 A, US3850330 A, US3820678 A, US2517542 A, GB2021530 A1, EP0366617 A2, EP0323812 A2, EP0280065 A1, AU604029 B2, AU604029,

Forward Citations: WO9923007, WO9744262, WO9641751, WO9610522, WO9610522, WO16014825, WO15153952, WO14145569, WO14088781, WO11112285, WO06045196, WO05092730, WO04106174, WO04085257, WO02068285, USD668555, USD626790, USD592954, USD587115, USD584145, US9676504, US9630762, US9611073, US9474397, US9469445, US9445631, US9359117, US9340332, US9334082, US9032698, US9022079, US8998030, US8991632, US8915395, US8910781, US8650839, US8556070, US8458996, US8418870, US8251236, US8210377, US8132600, US8100285, US8100277, US8071004, US7954521, US7886928, US7798359, US7798319, US7789254, US7784629, US7780024, US7766178, US7748525, US7644902, US7571829, US7454884, US7401452, US7231753, US7175039, US7134565, US7131250, US7076929, US7004341, US7003928, US6981601, US6974046, US6823651, US6702133, US6688081, US6375023, US6253940, US5992660, US5875906, US5785198, US5740914, US2014374446, US2014326735, US2013233845, US2011215097, US2011215023, US2011052768, US2011036839, US2010307113, US2010282706, US2010200588, US2010065557, US2009241477, US2009236353, US2009223986, US2009061044, US2009057318, US2007108155, US2007095781, US2007090111, US2006278601, US2006231519, US2006138141, US2006091100, US2006081625, US2005115964, US2004182047, US2004149676, US2004084333, US2003178385, US2003150833, JP5442850, JP2011513150, JP2006526547, FR2897043, ES2187341, EP1857372, EP1732818, EP1633639, EP0949156, DE102005019291, DE102005019291, CN102448842,

Abstract:
Source: US5258191A Easily removable press−on, pry−off closures having movable insert disks in an outer shell are disclosed. Pressing the shell upward to remove it from a container first pries a protrusion inside the shell over a snap rib around the container, then moves the shell upward relative to the disk while the later remains seated on the container, until a disk−lifting projection inside the shell engages the edge of the disk and lifts the disk to break the seal. A tamper evidencing band, if included, is broken before either the shell is pried off or the disk is lifted. The invention can be used in both top load and bottom load embodiments. Also disclosed is a closure with a non−movable disk or integral top and a tamper−evidencing band which is broken by pry−off removal of the closure. Still further, food packages which automatically open when heated in microwave ovens are disclosed. Vacuum−packed food packages having effective head spaces for reducing the times required to retort such packages are also disclosed.

0) US2004040618A – FOOD STORAGE CONTAINERS

31) Family number: 29935126 (US2004040618A) © PatBase

Title: FOOD STORAGE CONTAINERS

Priority:

DE20001060995	20001208	DE20001060996	20001208	DE20001060998	20001208
DE20001060999	20001208	EP20030757710	20031016	DE20015003676	20011114
DE20015009182	20011114	DE20015009185	20011115	US20040882520	20040701
US20030457285	20030609	US20030457319	20030609	DE20021030748	20020709
US20040882551	20040701	WO2003DE03430	20031016	WO2001EP13148	20011114
WO2001EP13233	20011115	WO2002EP14693	20021221	WO2001EP13234	20011115
WO2001EP13147	20011114				

Family:

Publication number	Publication date	Application number	Application date
AT276137 E	20041015	AT20010982485T	20011114
AT319628 E	20060315	AT20010995635T	20011115
AT319631 E	20060315	AT20010990412T	20011114
AT354521 E	20070315	AT20030757710T	20031016
AU200214052 A5	20020618	AU20020014052	20011114
AU2002214052 AA	20020618	AU20020214052	20011114
AU2002214052 BB	20040819	AU20020214052	20011114
AU2002214052 CA	20061207	AU20020214052	20011114
AU2002217034 AA	20020618	AU20020217034	20011115
AU2002226336 AA	20020618	AU20020226336	20011115
AU2002229550 AA	20020618	AU20020229550	20011114
AU2002360076 AA	20040123	AU20020360076	20021221
AU2003273753 AA	20050526	AU20030273753	20031016
BRPI0115272 A	20030812	BR2001PI15272	20011114
BRPI0115272 B1	20090811	BR2001PI15272	20011114
CA2431227 AA	20030606	CA20012431227	20011114
CN100420612 C	20080924	CN20018020153	20011114
CN1224555 C	20051026	CN20018019996	20011115
CN1248639 C	20060405	CN20018019995	20011114
CN1474776 A	20040211	CN20018018946	20011115
CN1478033 A	20040225	CN20018019995	20011114
CN1478041 A	20040225	CN20018019996	20011115
CN1479686 A	20040303	CN20018020153	20011114
DE10060995 A1	20020627	DE20001060995	20001208
DE10060996 C1	20020502	DE20001060996	20001208
DE10060998 C1	20011031	DE20001060998	20001208
DE10060999 C1	20020103	DE20001060999	20001208
DE10230748 C1	20030717	DE20021030748	20020709
DE50103676 D1	20041021	DE20015003676	20011114
DE50109182 D1	20060504	DE20015009182	20011114
DE50109185 D1	20060504	DE20015009185	20011115
DE50306614 D1	20070405	DE20035006614	20031016
DK1339608 T3	20050124	DK20010982485T	20011114
EP1339608 A1	20030903	EP20010982485	20011114
EP1339608 B1	20040915	EP20010982485	20011114
EP1339618 A1	20030903	EP20010995635	20011115
EP1339618 B1	20060308	EP20010995635	20011115
EP1339619 A1	20030903	EP20010990412	20011114

EP1339619 B1	20060308	EP20010990412	20011114	
EP1339620 A1	20030903	EP20010999514	20011115	
EP1673282 A1	20060628	EP20030757710	20031016	
EP1673282 B1	20070221	EP20030757710	20031016	
ES2228960 T3	20050416	ES20010982485T	20011114	
ES2256320 T3	20060716	ES20010990412T	20011114	
ES2256334 T3	20060716	ES20010995635T	20011115	
ES2280788 T3	20070916	ES20030757710T	20031016	
HK1059420 A1	20060804	HK20040100645	20040130	
HK1059420 A3	20040702	HK20040100645	20040130	
HK1059421 A3	20040702	HK20040100646	20040130	
HK1059422 A1	20060804	HK20040100648	20040130	
HK1059422 A3	20040702	HK20040100648	20040130	
HK1060551 A1	20060818	HK20040103540	20040519	
HK1060551 A3	20040813	HK20040103540	20040519	
IN00446MN2003 A	20060113	IN2003MN00446	20030425	
JP2004515679 T2	20040527	JP20020547797T	20011114	
KR100582877 B1	20060524	KR20037005989	20011114	
KR20030051759 A	20030625	KR20037005989	20030430	
MXPA03003096 A1	20040504	MX2003PA03096	20011114	
PL364383 A1	20041213	PL20010364383	20011114	
RU2003114306 A	20041010	RU20030114306	20011114	
RU2283801 C2	20060920	RU20030114306	20011114	
US2004040618 AA	20040304	US20030457319	20030609	
US2004040961 AA	20040304	US20030457285	20030609	
US2005061812 AA	20050324	US20040882520	20040701	
US2005061813 AA	20050324	US20040882551	20040701	
US7096893 BB	20060829	US20030457319	20030609	
US7131550 BB	20061107	US20040882520	20040701	
US7328730 BB	20080212	US20040882551	20040701	
WO0246044 A1	20020613	WO2001EP13147	20011114	
WO0246057 A1	20020613	WO2001EP13234	20011115	
WO0246061 A1	20020613	WO2001EP13148	20011114	
WO0246062 A1	20020613	WO2001EP13233	20011115	
WO04005159 A1	20040115	WO2002EP14693	20021221	
WO05044667 A1	20050519	WO2003DE03430	20031016	

Probable Assignee: BRAUN GMBH

Assignee(s):(std)**:** BRAUN GMBH ; BRAUN GMBKH ; CORONADO JUAN CARLOS ; FRANKE HELMUT ; GILI SERGI ; VILALTA MONTSERRAT ; MILLAN JOSE ; PENARANDA MARIANO ; REBORDOSA ANTONIO ; RAFOLS ROBERT ; VORBECK WOLFGANG ; HERNANDEZ ALEJANDRO

Inventor(s):(std)**:** MILLAN JOSE ; PENARANDA MARIANO ; REBORDOSA ANTONIO ; VILALTA MONTSERRAT ; VORBECK WOLFGANG ; VILALTA M ; SERGI GILI ; RAFOLS ROBERT ; MONTSERRAT VILALTA ; MILLAN KHOSE ; MILLAN J ; MARIANO PENARANDA ; M VILALTA ; KORONADO KHUAN KARLOS ; JUAN CAROLOS CORONADO ; JUAN CARLOS CORONADO ; JOSE MILLAN ; JC CORONADO ; J MILLAN ; HERNANDEZ ALEJANDRO ; GILI SERGI ; FRANKE HELMUT ; CORONADO M VILALTA J MILLAN J ; CORONADO JUAN CAROLOS ; CORONADO JUAN CARLOS ; CORONADO J C ; ANTONIO REBORDOSA ; VIALTA MONTSERRAT

Inventor(s): PEARANDA MARIANO ; ALEJANDRO HERNANDEZ ; J C CORONADO ; CORONADO JUAN ; HELMUT FRANKE ; M VILALTA J MILLAN JC CORONADO ; M VILALTA J MILLAN J C CORONADO ; ROBERT RAFOLS ; WOLFGANG VORBECK

Agent(s):

DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; MACRAE AND CO; FISH AND RICHARDSON PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A23L3/3418 A47J43/00 A47J43/04 B65B1/04 B65B31/04 B65B39/00 B65D1/00 B65D51/16 B65D79/00 B65D79/02 B65D81/20 F04C18/344 F04C23/00 F04C23/02 F04C25/02 F04C29/00 G01L7/08 (Advanced/Invention); B65B31/04 B65D31/04 (Advanced/Non–invention); A23L3/34 A47J43/00 A47J43/04 B65B1/04 B65B31/04 B65D51/16 B65D79/00 B65D81/20 F04C18/34 F04C23/00 F04C25/00 F04C29/00 (Core/Invention)

International class (IPC 1–7): A23L3/3418 A47J A47J43/07 B65B B65B B65B031/04 B65B31/00 B65B31/04 B65D B65D41/56 B65D51/16 B65D51/24 B65D51/26 B65D51/28 B65D51/30 B65D51/32 B65D79/00 B65D79/02 B65D81/20 F04C18/344 F04C23/00 F04C23/02 F04C25/02

CPC: B65D79/02 B65B31/047 F04C18/3442 F04C29/0071 F04C2220/10 B65D51/1683 B65D79/005 B65D81/2015 B65D81/2038 B65D2203/12

European class: B65B31/04E1 B65D51/16E2 B65D79/00B B65D79/02 B65D81/20B1 B65D81/20B3 F04C18/344B2 F04C29/00D2F L65D203/12 R04C220/10

US class: 116/270 141/325 141/326 141/65 141/8 206/524.8 215/230 215/260 215/262 220/203.05 220/203.11 220/203.16 220/203.23 220/212 220/231 220/254.3 220/367.1 99/472

Classification Explorer

Cited documents: WO9717259 A1, WO9607590 A1, WO9108151 A1, WO8800560 A1, WO0246057 A1, US6799506 BB, US6799506 BA, US5974686 A, US5955127 A, US5806703 A, US5803282 A, US5779082 A, US5762282 A, US5762228 A, US5735317 A, US5465857 A, US5279550 A, US5277876 A, US5195427 A, US5137424 A, US4838772 A, US4793717 A, US4778072 A, US4674642 A, US4051971 A, US4016999 A, US3737066 A, US3241514 A, US2655894 A, US2634014 A, US2130180 A, US2004173105 AA, RU2089087 C1, JP7277374 A2, GB2317882 A1, FR2692870 A1, FR2235064 A2, EP0820999 A1, EP0820939 A1, EP0644128 A1, EP0633196 A2, EP0510360 A1, EP0234607 B1, EP0234607 A1, DE8321236 U, DE8321236, DE7409380 U, DE7409380, DE4342394 C1, DE4342394 A1, DE4334250 A1, DE4306171 A1, DE4136150 A1, DE29920316 U1, DE29920316, DE29920316, DE2992031, DE2821852 A1, DE19504638 A1, DE10060999 C1, DE10060998 C1, DE10060996 C1, CH304374 A, CH304374,

Forward Citations: WO15062744, WO15018645, WO11118886, WO10102044, WO10053441, WO09042844, WO08112093, WO07106676, WO06043733, WO05047112, WO05044667, WO04090213, WO04005159, WO03068607, WO03068607, USD772640, USD772002, USD771998, USD771997, USD771432, USD771431, USD675057, USD673808, USD673807, USD615347, USD574485, US9663276, US9624013, US9615689, US9375537, US9359121, US9296467, US9265881, US9242782, US9187223, US9108788, US9085389, US8967413, US8966869, US8833591, US8827556, US8757053, US8733550, US8667768, US8662334, US8430259, US8419279, US8362404, US8348107, US8276776, US8251340, US8240112, US8231273, US8192182, US8176604, US8113246, US8096329, US7967509, US7946766, US7887238, US7886412, US7874731, US7857515, US7857514, US7784160, US7726880, US7621416, US7597479, US7578320, US7389629, US7328730, US7290660, US7131550, US7096893, US6994227, US2016288966, US2015105724, US2015105720, US2015047741, US2013196039, US2013139472, US2012266570, US2012195529, US2012193257, US2012125931, US2012018432, US2011278278, US2011203944, US2010218461, US2010200588, US2010175850, US2010102058, US2010084307, US2010075001, US2009250465, US2009199724, US2009110777, US2009101535, US2008308177, US2008241441, US2008085347, US2008028730, US2007209326, US2007175896, US2006227492, US2006159576, US2004232026, US2004155041, KR100969703, KR100853752, EP2403775, EP1616984, EP1323643, DE202004005887, DE10348119, DE10317310, DE10230748, CN105492847,

Abstract:
Source: US2004040618A A food storage container includes a lid with a vent hole, and a removable cover removably secured to the lid to cover the vent hole. The cover has an evacuation hole. The food storage container further includes a one–way air valve disposed between the vent hole and evacuation hole. With the cover secured to the lid, the one–way air valve inhibits air flow into the container through the vent hole while allowing air flow out of the container via the vent hole and evacuation hole. With the cover removed, the one–way air valve allows bi–directional air flow through the vent hole. An outer surface of the cover defines a smooth sealing area extending about the evacuation hole for sealing against a vacuum pump held against the cover over the evacuation hole to evacuate the container.

0) US2011303672A – FLAP SCORE VENTING OF CAN END

32) Family number: 50099678 (US2011303672A) © PatBase

Title: FLAP SCORE VENTING OF CAN END

Priority: EP20110792880 20110526 US20100796972 20100609 WO2011US38050 20110526

Family:

Publication number	Publication date	Application number	Application date
AU2011264511 AA	20111215	AU20110264511	20110526
AU2011264511 BB	20151210	AU20110264511	20110526
BR112012031527 A2	20161108	BR20121131527	20110526
CA2802053 AA	20121207	CA20112802053	20110526
CN103221314 A	20130724	CN201180039326	20110526
CN103221314 B	20170301	CN201180039326	20110526
DK2580135 T3	20170116	DK20110792880T	20110526
EP2580135 A1	20130417	EP20110792880	20110526
EP2580135 A4	20140430	EP20110792880	20110526
EP2580135 B1	20160921	EP20110792880	20110526
ES2607602 T3	20170403	ES20110792880T	20110526
JP2013531590 T2	20130808	JP20130514201T	20110526
JP5921532 B2	20160524	JP20130514201T	20110526
MA34367 B1	20130703	MA20130035545	20130107
MX2012014419 A1	20130226	MX20120014419	20110526
SA3933 B1	20150309	SA20110320517	20110608
SG186245 A1	20130130	SG20120090486	20110526
TH127573 A	20130920	TH20121006428	20110526
TR201618414 T4	20170123	TR20160018414T	20110526
US2011303672 AA	20111215	US20100796972	20100609
WO11156140 A1	20111215	WO2011US38050	20110526
ZA201209642 A	20150729	ZA20120009642	20121219

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC ; FIELDS BRIAN ; KEANE BRENDAN ; CROWN CORK AND SEAL TECH CORP

Assignee(s): CROWN CORK AND SEAL TECHNOLOGIES CORP ; DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS

Inventor(s):(std)**:** KEANE BRENDAN ; FIELDS BRIAN

Inventor(s): BRIAN FIELDS ; BRENDAN KEANE

Agent(s): PETER MAXWELL AND ASSOCIATES; FETHERSTONHAUGH AND CO; SMITH DEBRA JANE CLARE; WHITE DUNCAN ROHAN; CARPINTERO MARIO; INO SARI; KURASAWA ICHIRO; MATSUSHITA MITSURU; DESHIMARU TAKESHI; KUMAKURA YOSHIO; TOLGA CAYLAK; FULLMER HAROLD H ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/38 B26D3/08 B65B43/38 B65D17/00 B65D17/28 B65D17/34 (Advanced/Invention); B65D17/34 (Core/Invention); B65D (Subclass/Invention)

CPC: B65D17/165 B65D17/163 B21D51/383 B65D2517/0016 B65D2517/0062 B65D2517/0092 Y10T83/0333

European class: B21D51/38B B65D17/16B1 L65D517/00Y2D L65D517/00Y7A1A L65D517/00Y8A

US class: 220/269 53/492 53/492S 83/879 83/879S

Classification Explorer

Cited documents: WO11026900 A1, USRE30349 E, US4930658 A, US4014455 A, US3977561 A, US3951299 A, US3701330 A, US2008067171 AA, US2004076721 AA, US2004026433 AA, US2003121920 AA, JP61217347 A2, JP61217347, JP59133439 U1, JP59133439 U, JP59133439 U, CN2560573 Y, CN1191513 A,

Forward Citations: WO15183812, WO15070051, WO14158115, WO14055399, USD762114, USD751922, USD750488, USD749415, US9580203, US9550604, US9446879, US9233784, US9033175, US2015166216, US2013118133, EP3009368, CN105873830, CN104837733,

Abstract:
Source: US2011303672A A vent score lacks features to arrest score propagation. Rather encourages fast score propagation upon initial rupture. Venting is achieved through a flap configuration formed by the vent score.

0) GB2103174A – EASY OPEN CAN END

33) Family number: 8934805 (GB2103174A) © PatBase

Title: Easy open can end

Priority: GB19810023861 19810804

Family:

Publication number	Publication date	Application number	Application date
GB2103174 A1	19830216	GB19810023861	19810804

Probable Assignee: CVACHO DANIEL STEVE

Assignee(s):(std)**:** CVACHO DANIEL STEVE

Assignee(s): DANIEL STEVE CVACHO

Inventor(s):(std)**:** CVACHO DANIEL STEVE

Inventor(s): DANIEL STEVE CVACHO

International class (IPC 8–9): B21D51/38 B65D17/32 (Advanced/Invention); B21D51/38 B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/32 B65D41/32

CPC: B21D51/383 B65D17/165 B65D2517/0098

European class: B21D51/38B B65D17/16B2 L65D517/00Y9

Classification Explorer

Forward Citations: GB2156772,

Abstract:
Source: GB2103174A A tab 42 is rivetted at 26 to a tear strip and is twisted over and over to wrap the tear strip around the tab, which is finally located in a recess 44 in the can end. Ribs 34, 36a and 36b define the movement of the tab and protect the users lips from sharp edges when drinking. Similarly a depression 38 in the tear strip forms a raised pad to protect the nose and upper lip of the user. In one construction, there is a layer of sealant between the tab and strip where they are rivetted together. A sanitary cover may overlie the tear strip and part of the can rim and is rolled up with the strip when the can is opened.

0) US5931331A – EASY–OPEN MECHANISM FOR CAN END

34) Family number: 11656289 (US5931331A) © PatBase

Title: EASY–OPEN MECHANISM FOR CAN END

Priority: US19970805204 19970227

Family:

Publication number	Publication date	Application number	Application date
US5931331 A	19990803	US19970805204	19970227

Probable Assignee: CROWN CORK AND SEAL TECHNOLOGIES

Assignee(s):(std)**:** CROWN CORK AND SEAL TECH CORP

Assignee(s): CROWN CORK AND SEAL TECHNOLOGIES ; CROWN CORK AND SEAL TECHNOLOGIES CORP ; DEUTSCHE BANK AG ; DEUTSCHE BANK NEW YORK BRANCH AGENT AG AS ; CROWN PACKAGING TECHNOLOGY INC ; CHASE MANHATTAN BANK AS COLLATERAL AGENT ; CHASE MANHATTAN BANK COLLATERAL AGENT AS ; CITICORP NORTH AMERICA INC ; CITICORP NORTH AMERICA INC COLLATERAL AGENT AS

Inventor(s):(std)**:** CALHOUN MICHAEL C ; HOFFMAN DAVID M ; KIRK WILLIAM A ; MCFARLAND JEFFREY

International class (IPC 8–9): B65D41/32 (Advanced/Invention); B65D41/32 (Core/Invention)

International class (IPC 1–7): B65D41/32

CPC: Y10S220/906 B65D17/165 B65D2517/0014 B65D2517/0089

European class: B65D17/16B2 L65D517/00Y2C L65D517/00Y7Z

US class: 220/269 220/906

Classification Explorer

Cited documents: US5692636 A, US5375729 A, US5129541 A, US5064087 A, US4930658 A, US4901880 A, US4733793 A, US4605141 A, US4465204 A, US4402421 A, US4387827 A, US4320850 A, US4084721 A, US4062471 A, US4051976 A, US3967752 A, US3843011 A, DE2553835 A1,

Forward Citations: WO02070165, WO02066178, US6575684, US6164480,

Abstract:
Source: US5931331A A can end having an improved pour–type ecology opening mechanism includes a conventional can end wall that contains a score line that defines a displaceable panel. The score line includes an initial design rupture point, a radiused portion having a first tangent point and a second tangent point, and a main portion that terminates at a final transition point. The can end further includes a tab having a liftable heel portion and a tab nose portion, with the tab nose portion being positioned to apply downward pressure to the panel at a pressure point on the displaceable panel when the heel portion is lifted. The tab has a center line that is coincident with a radius of said can end wall. Advantageously, the pressure point is positioned a distance, taken in the direction of the center line, from the second tangent point of the radiused portion that is selected to prevent a buildup of force that would otherwise hasten propagation of separation along the main portion of the score. This prevents splashing of the beverage during opening of the can by the consumer.

0) US2004056032A – LARGE OPENING BEVERAGE CONTAINER

35) Family number: 30397221 (US2004056032A) © PatBase

Title: LARGE OPENING BEVERAGE CONTAINER

Priority: US20020412435P 20020919 US20030656421 20030905 WO2003US28975 20030919

Family:

Publication number	Publication date	Application number	Application date
AT384005 E	20080215	AT20030755825T	20030919
AU2003273325 AA	20040408	AU20030273325	20030919
AU2003273325 BB	20081127	AU20030273325	20030919
BRPI0314439 A	20050719	BR2003PI14439	20030919
BRPI0314439 B1	20130528	BR2003PI14439	20030919
CA2496666 AA	20050222	CA20032496666	20030919
CN100396570 C	20080625	CN20038021142	20030919
CN1681711 A	20051012	CN20038021142	20030919
DE60318730 D1	20080306	DE20036018730	20030919
DE60318730 T2	20090115	DE20036018730T	20030919
EP1556287 A1	20050727	EP20030755825	20030919
EP1556287 A4	20060906	EP20030755825	20030919
EP1556287 B1	20080116	EP20030755825	20030919
ES2298559 T3	20080516	ES20030755825T	20030919
MXPA05002940 A1	20050603	MX2005PA02940	20030919
TH27380 B	20100201	TH20031003542	20030919
TH71721 A	20051103	TH20031003542	20030919
US2004056032 AA	20040325	US20030656421	20030905
US6889862 BB	20050510	US20030656421	20030905
WO04026712 A1	20040401	WO2003US28975	20030919

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP ; VAUGHAN JOSEPH S

Assignee(s): BALL 10 LONGS PEAK DRI CORPVEB

Inventor(s):(std)**:** JOSEPH S VAUGHAN ; VAUGHAN JOSEPH ; VAUGHAN JOSEPH S

Inventor(s): JOSEPH VAUGHAN

Agent(s): PHILLIPS ORMONDE FITZPATRICK; GOODWIN MCKAY; PARLEE MCLAWS LLP; GROSSE BOCKHORNI SCHUMACHER; SHERIDAN ROSS PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B65D17/34 (Advanced/Invention); B65D17/34 (Core/Invention)

International class (IPC 1–7): A61B5/00 B65D17/34

CPC: B65D17/165 B65D2517/0007 B65D2517/0014 B65D2517/0028 B65D2517/007 B65D2517/0071

European class: B65D17/16B2 L65D517/00Y1C L65D517/00Y2C L65D517/00Y4A L65D517/00Y7B1 L65D517/00Y7B2

US class: 220/269

Classification Explorer

Cited documents: USD406236 S1, USD352898 S1, USD337521 S1, USD304302 S1, USD300608 S1, USD285661 S1, USD279265 S1, US6405889 BA, US6260728 BA, US6164480 A, US6050440 A, US6024239 A, US5711448 A, US5494184 A, US5129541 A, US5064087 A, US4893725 A, US4681238 A, US4674649 A, US4286728 A, US4276993 A, US4210257 A, US4150765 A, US4148410 A, US4024981 A, US4015744 A, US3967752 A, US3334775 A,

Forward Citations: WO16087268, WO14152235, WO14150205, USD762114, USD751922, USD750488, USD749415, USD731887, USD727725, USD715647, USD715144, USD704555, USD677585, USD677584, USD672663, USD663622, USD663210, USD661204, USD661203, USD658078, USD656042, USD653563, USD653562, USD653126, USD653125, USD653124, USD653123, USD652742, USD652741, USD652740, USD651527, USD651526, USD649887, USD641261, USD638311, USD632190, USD632189, USD632188, USD632187, USD631759, USD626015, USD624438, USD621724, USD620377, USD615877, USD614970, USD614969, USD614049, USD612732, USD607727, USD607330, USD607329, USD606406, USD606405, USD606404, USD606403, USD606402, USD599678, USD599677, USD596958, USD596957, USD596956, USD596955, USD596505, USD596504, USD596503, USD596502, USD596501, USD596500, USD588021, USD588020, USD588019, USD588018, USD588017, USD588016, US9637269, US9580203, US9540137, US9446879, US9403628, US9315290, US9272819, US9248936, US9233784, US9216840, US9181007, US9162795, US9033175, US9033174, US8973780, US8950619, US8844761, US8646643, US8640905, US8141741, US8109406, US8109405, US2009218349, US2009057315, US2008314906, US2008099480, US2007108208, JP2009126523, EP3028952, EP2844573, CN105873829, CN105102332,

Abstract:
Source: US2004056032A The present invention relates to an improved opening end closure which is adapted for interconnection to a beverage container to prevent premature rupturing and detachment of the tear panel from the center panel. More specifically, the present invention includes an improved cent bead, an enlarged score origination loop, and a pull tab with a cut−out portion with one leg longer than the other leg for selectively orienting the direction of force created on the tear panel away from the hinge portion of the tear panel.

0) US2010025402A – PUSHDOWN OPENINGS WITH PURCHASE, LEVERAGE AND G...

36) Family number: 44322974 (US2010025402A) © PatBase

Title: PUSHDOWN OPENINGS WITH PURCHASE, LEVERAGE AND GAS–TIGHT RESEALABILITY FOR CAN ENDS

Priority: US20080067806P 20080303 US20080188494P 20080811 WO2009US01503 20090304 US20090583008 20090811

Family:

Publication number	Publication date	Application number	Application date
US2010025402 AA	20100204	US20090583008	20090811

Probable Assignee: HOFFMAN JONATHAN H

Assignee(s):(std)**:** HOFFMAN JONATHAN H ; LAZICH MATTHEW

Inventor(s):(std)**:** HOFFMAN JONATHAN H ; LAZICH MATTHEW

Agent(s): GEORGE PHILIP WHITE,PATENT AGENT; GEORGE PHILIP WHITE PATENT AGENT

International class (IPC 8–9): B65B43/38 B65D17/34 (Advanced/Invention); B65B43/38 B65D17/28 (Core/Invention)

CPC: B65D17/166 B65D2517/002 B65D2517/0032

European class: B65D17/16B2B L65D517/00Y2Z L65D517/00Y5A

US class: 220/270 53/492

Classification Explorer

Forward Citations: WO15099636, WO14135619, US9457930, US9254945, US2014054332, US2012199586, JP2012184027, CN102874457, CN102795384, CN102795384,

Abstract:
Source: US2010025402A An easy–to–open and optionally resealable beverage can end provides opening by pressing downward. An actuator lies flat initially to conform to stackability requirements, but is readily repositionable to a ready–to–open state. In the ready–to–open state a planer surface of the actuator or tab is at a substantial angle to the can's top. A rigid body is interposed between it and the can's tear panel. The actuator is secured to the can top. Downward force ruptures the tear panel, opening the can. Using a wide actuator, a shallow protrusion on the actuator enables gas–tight resealability of a can opening. The shallow protrusion has an interrupted helix and fits into the can opening. Providing tab attachment via a radiused slot allows the small degree of rotational movement needed for the helix to be turned and pull the actuator bottom sealingly abutted proximate to the perimeter of the opened area.

0) US4301940A – EASY OPEN CAN END CONSTRUCTION

37) Family number: 8426720 (US4301940A) © PatBase

Title:	Easy open can end construction
Priority:	US19800172177 19800725

Family:

Publication number	Publication date	Application number	Application date
US4301940 A	19811124	US19800172177	19800725

Probable Assignee:	CVACHO DANIEL S
Assignee(s):(std)**:**	CVACHO DANIEL S
Inventor(s):(std)**:**	CVACHO DANIEL S
International class (IPC 8–9)**:**	B65D17/32 B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)
International class (IPC 1–7)**:**	B65D17/32 B65D17/34
CPC:	B65D17/165 B65D2517/0098
European class:	B65D17/16B2 L65D517/00Y9
US class:	220/269 220/274

Classification Explorer

Cited documents:	US3970212 A, US3204805 A,
Forward Citations:	WO9207766, US9573724, US5531340, US5292022, US5190149, US5114068, US2011147382, GB2291030,

Abstract:
Source: US4301940A An easy open can end construction and method of making it. The pull tab and tear strip remain fully locked onto the can end, and the opening strip does not dip into the beverage. Bead members positioned externally of the tear strip not only preserve a desired orientation of the pull tab with respect to the tear strip but also serve as a guard against the user's face or tongue contacting the raw edge left after lifting the tear strip. The tear strip itself is provided with one or more protective pads to protect the user's face. A sanitary cover member overlies the tear strip and is rolled up with the pull tab and tear strip becoming interlocked therewith. A method of making the score line pattern is included so that tearing occurs along a single side of the bottom of the score line pattern to avoid a zigzag tear pattern which is dangerous to the user's tongue or lips. Finally, a method of making a rivet is included in which two metal thicknesses are joined together to avoid a leaking problem encountered in single metal thickness rivets.

0) US4524646A – TAB CAN OPENING TOOL

38) Family number: 4789672 (US4524646A) © PatBase

Title: TAB CAN OPENING TOOL

Priority: US19830463598 19830602

Family:

Publication number	Publication date	Application number	Application date
US4524646 A	19850625	US19830463598	19830602

Probable Assignee: KIMBERLIN JR FRED

Assignee(s):(std)**:** KIMBERLIN JR FRED

Inventor(s):(std)**:** KIMBERLIN JR FRED

International class (IPC 8–9): B67B7/40 (Advanced/Invention); B67B7/00 (Core/Invention)

International class (IPC 1–7): B67B7/40

CPC: Y10S7/901 B67B7/403

European class: B67B7/40B

US class: 7/901 81/3.55 81/355

Classification Explorer

Cited documents: US4373246 A, US4371021 A, US4309921 A, US4257287 A, US4253352 A,

Forward Citations: WO04065282, WO04002873, US8870012, US8695457, US8496069, US8434563, US8156626, US6219869, US5947317, US5771759, US5555778, US5509380, US5337632, US5267945, US5107728, US5079791, US4899050, US4873896, US4864898, US4712454, US4663994, US4617842, US2011314968, US2011209886, US2009090716, GB2288161,

Abstract:
Source: US4524646A A hand–held tool for opening tab open cans. The tool includes an elongated body having an opening with converging surfaces which can be slipped over the tab. A narrow edge at the lower margin of the opening assists initially in lifting the tab away from the can end. As the tool is pivoted upwardly, a chisel–shaped nose portion on the front end of the tool assists in pressing the weakened portion of the can end inwardly. The relationship between the tool nose portion and the thin edge prevents interference between the nose portion and the can end when the tool is initially slipped onto the tab.

0) US2004099664A – MODIFIED SCORE FOR SMOOTH OPENABILITY

39) Family number: 30587869 (US2004099664A) © PatBase

Title: MODIFIED SCORE FOR SMOOTH OPENABILITY

Priority: US20020304243 20021126 WO2003US37290 20031120

Family:

Publication number	Publication date	Application number	Application date
AT471881 E	20100715	AT20030786976T	20031120
AU2003295772 AA	20040618	AU20030295772	20031120
BRPI0316736 A	20051018	BR2003PI16736	20031120
BRPI0316736 B1	20150512	BR2003PI16736	20031120
DE60333127 D1	20100805	DE20036033127	20031120
EP1601580 A1	20051207	EP20030786976	20031120
EP1601580 B1	20100623	EP20030786976	20031120
MXPA05005368 A1	20051005	MX2005PA05368	20031120
RU2005116223 A	20060210	RU20050116223	20031120
RU2335441 C2	20081010	RU20050116223	20031120
US2004099664 AA	20040527	US20020304243	20021126
US6761281 BB	20040713	US20020304243	20021126
WO04048215 A1	20040610	WO2003US37290	20031120

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** HARTMAN WILLIAM H ; REKSAM BEVERIDZH KEHN KOMPANI ; REXAM BEVERAGE CAN CO

Assignee(s): REXAM BEVERAGE CAN COMPANY

Inventor(s):(std)**:** HARTMAN WILLIAM ; HARTMAN WILLIAM H ; KHARTMAN UIL JAM KH ; WILLIAM H HARTMAN

Inventor(s): KHARTMAN UIL'JAM KH.

Agent(s): CAWLEY AIMEE ELIZABETH

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B65D17/32 B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/32 B65D17/34

CPC: Y10S220/906 B65D17/165 B65D2517/0014

European class: B65D17/16B2 L65D517/00Y2C

US class: 220/269 220/906

Classification Explorer

Cited documents: USRE31702 E, USD424438, USD402555 S1, USD397296 S1, USD385192 S1, USD382481 S1, US6354453 BA, US6330954 BA, US6260728 BA, US6164480 A, US6161717 A, US6129230 A, US6024239 A, US5934498 A, US5875911 A, US5860553 A, US5738237 A, US5715964 A, US5711448 A, US5692636 A, US5653355 A, US5555992 A, US5456378 A, US5405039 A, US5375729 A, US5373721 A, US5307947 A, US5219257 A, US5129541 A, US5064087 A, US5011037 A, US5007554 A, US4994009 A, US4930658 A, US4901880 A, US4804104 A, US4801038 A, US4796772 A, US4733793 A, US4576305 A, US4504181 A, US4402421 A, US4363419 A, US4320850 A, US4305523 A, US4257529 A, US4254890 A, US4205760 A, US4184607 A, US4122791 A, US4105134 A, US4084721 A, US4061243 A, US4030631 A, US4027612 A, US4024981 A, US4023703 A, US4018178 A, US4015744 A, US4006700

A, US3982657 A, US3967752 A, US3954075 A, US3952912 A, US3949692 A, US3946683 A, US3938455 A, US3912114 A, US3870001 A, US3836038 A, US3757989 A, US3688718 A, US3687099 A, US3650006 A, US3563199 A, US3424337 A, US3411470 A, US3291336 A, US2003042258 AA, US2003034346 AA, US2002113069 AA, JPS62199237, JPS57199535, JP8244769 A2, JP62199237 A2, JP6024443 A2, JP57199535 A2, JP2003137284, JP1308744 A2, GB563812 A, EP0704382 A2, EP0564725 A1,

Forward Citations: WO14152235, WO09095672, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD691039, US9650449, US9580203, US9561888, US9446879, US9254945, US9233784, US9187581, US9181007, US9033175, US8969484, US8937134, US8895672, US8783495, US8627979, US8592527, US8567158, US8507641, US8492491, US8394897, US8383760, US8344073, US8133954, US8063154, US8013073, US7975884, US7816459, US7709580, US2016023801, US2014054332, US2013126529, US2013118133, US2011089134, US2008011786, US2007284374, RU2575062, EP2085319,

Abstract:
Source: US2004099664A An ecology end member for a beverage container has a central panel wall with a product side, a public side, and an outer peripheral edge. A non−detachable tab is secured to the public side of the central panel wall by a rivet. A displaceable tear panel is located in the central panel wall adjacent the rivet. The tear panel is defined by a frangible score and a non−frangible hinge segment. The frangible score has a tear panel geometry with an outer periphery defined by a curvilinear score length. The tear panel geometry is asymmetrically skewed having a large radius of score curvature in a first outer quadrant of the tear panel to provide low resistance to opening the tear panel at the large radius. The tear panel has a radially outermost segment of the score located in a different quadrant of the tear panel.

0) US2013146592A – SUPPLEMENTAL LIQUID STORAGE DEVICE ATTACHABLE T...

40) Family number: 48019860 (US2013146592A) © PatBase

Title: SUPPLEMENTAL LIQUID STORAGE DEVICE ATTACHABLE TO A PRIMARY BEVERAGE CONTAINER

Priority: US20090211139P 20090326 US20090496502 20090701 US20120684568 20121125 US20130758980 20130204

Family:

Publication number	Publication date	Application number	Application date
BR102012031177 A2	20130924	BR20121031177	20121207
US2013146592 AA	20130613	US20130758980	20130204
US8365960 BA	20130205	US20090496502	20090701
US8662351 BB	20140304	US20130758980	20130204
WO11003048 A1	20110106	WO2010US40852	20100701

Probable Assignee: KALAOUZE FADI

Assignee(s):(std)**:** KALAOUZE FADI

Assignee(s): FADI KALAOUZE

Inventor(s):(std)**:** KALAOUZE FADI ; MCCLUNG DAVID

Inventor(s): FADI KALAOUZE

Agent(s): MARK; MARK YOUNG PA; YOUNG MARK

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class(IPC 8–9)**:** B65D81/32 B67D7/74 B67D7/78 (Advanced/Invention)

CPC: B65D81/3211

European class: B65D81/32B1

US class: 206/221 206/222 206/229 215/45 215/6 215/902 220/23.83 220/254.9 220/271 220/501 220/712 220/713 220/810 220/906 222/129 222/145.5 222/153.07 222/166 222/488 222/570 426/115

Classification Explorer

Cited documents: US8083055 BB, US7377383 BB, US6540112 BA, US6176395 BA, US5108003 A, US5071042 A, US4579257 A, US4576306 A, US3887069 A, US3851800 A, US3335893 A, US3116855 A, US2007138179 AA, US2004007594 AA, GB1241985 A,

Forward Citations: WO15136519, WO15113963, WO13036692, USD731238, US9622605, US9596880, US9199779, US9114910, US9102441, US2016207675, US2016052674, US2016044953, US2016044938, US2015232318, US2015129613, US2014339253, US2013297840, US2009311389, EP2753553, DE102014101073,

Abstract:
Source: US2013146592A A secondary container assembly includes a skirt configured to securely and removably engage the rim of a beverage can. The secondary container includes a secondary compartment holding a secondary liquid. A primary flow channel extends through the secondary container to provide a fluid flow path from the open beverage can to an outlet of the secondary container. A plurality of mixing apertures provide fluid communication ports between the secondary compartment and the primary flow channel, allowing the secondary liquid to mix with beverage from the can in the primary flow channel. A vent tube prevents a vacuum from forming that would otherwise impede flow of the secondary liquid into the primary flow channel. A removable seal covers the outlet and mixing ports. A threaded lid holds the seal in place.

0) US3717279A – NONDETACHABLE TEAR STRIP WITH WING TAB

41) Family number: 1367272 (US3717279A) © PatBase

Title: NONDETACHABLE TEAR STRIP WITH WING TAB

Priority: AU19730051327 19730122 US19720221205 19720127 US19720221214 19720127

Family:

Publication number	Publication date	Application number	Application date
AU197351327 A1	19740725	AU19730051327	19730122
AU475044 B2	19760812	AU19730051327	19730122
CA992890 A1	19760713	CA19730162162	19730126
CA992891 A1	19760713	CA19730162163	19730126
DE2303859 A1	19730816	DE19732303859	19730126
GB1375678 A	19741127	GB19730003585	19730124
IT977080 A	19740910	IT19730047924	19730126
JP48086679 A2	19731115	JP19730010955	19730126
SE383135 B	19760301	SE19730001046	19730125
SE383135 C	19760610	SE19730001046	19730125
US3717279 A	19730220	US19720221205	19720127
US3738526 A	19730612	US19720221214	19720127

Probable Assignee: NAT CAN CORP

Assignee(s):(std)**:** NAT CAN CORP

Assignee(s): NAT CAN CORP US ; NATIONAL CAN CORP ; NATIONAL CAN CORP CHICAGO ILL V ST A ; NICKEL WARREN A ; PATARINI LEON M ; ZUNDEL ARTHUR P ; AMERICAN NATIONAL CAN CORP ; KRATOCHVIL FRANK

Inventor(s):(std)**:** KRATOCHVIL F ; NICHEL W A ; NICKEL W ; NICKEL W A ; KRATOCHVIL FRANK ; NICKEL WARREN A ; PATARINI L ; PATARINI L M ; PATARINI LEON M ; ZUNDEL A ; ZUNDEL A P ; ZUNDEL ARTHUR P

Inventor(s): ZUNDEL ARTHUR P CARY ; ZUNDEL A US ; PATARINI LEON M PALOS HILLS ; WARREN A NICKEL ; PATARINI L US ; NICKEL WARREN A CHICAGO ; KRATOCHVIL FRANK STICKNEY ; LEON M PATARINI ; NICKEL W US ; KRATOCHVIL F US ; ARTHUR P ZUNDEL ; ARTHUR P ZUNDEL LEON M PATARINI WARREN A NICKEL AND FRANK KRATOCHVIL ; FRANK KRATOCHVIL

International class (IPC 8–9): B65D17/32 B65D17/34 B65D17/347 B65D17/35 B65D17/353 B65D41/42 (Advanced/Invention); B65D17/28 B65D41/32 (Core/Invention); B65D (Subclass/Invention)

International class (IPC 1–7): B65D17/16 B65D17/18 B65D17/20 B65D17/24 B65D17/32 B65D17/34 B65D41/42

CPC: B65D17/16 B65D17/165

European class: B65D17/16 B65D17/16B2

US class: 220/269 220/275 220/54 D9/438

Classification Explorer

Cited documents: US3653535 A, US3618815 A,

Forward Citations: WO9014280, WO07147542, US9272823, US8556104, US6286703, US5975327, US5894950, US5411159, US4992128, US4915290, US4913294, US4852740, US4537326, US4491236, US4402421, US4184605, US4061243, US3994411, US3952914, US3952912, US3927795, US3923193, US3894651, US3877606, US3874555, US2015353229, US2013284742, US2012248113, US2011006062, US2010213194, US2009206083, JP58121830, JP57167024, JP50130589, FR2393733, EP0080775, EP0080775, EP0019373, DE3204974, DE2623704, DE2352737,

Abstract:
Source: US3717279A ABSTRACT OF THE DISCLOSURE A container end panel is formed with a score line de−ìning a tear strip permanently attached at one end to the panel. A tab has deflectable fingers extending

later−ally outwardly along opposite sides adjacent the connect−ing means to maintain the connecting end of the tab with−in the container after pivotai movement of the tab to institute severing of the score line. The opening in the panel created by the score line has a reduced portion adjacent the permanent connection between the panel and the tear strip while the tab has an enlarged portion on the connecting end and a reduced portion intermediate the ends that is received into the reduced portion of the opening so that the tab is guided along the opening to a stored position adjacent the permanent connection while the tear strip is bent intermediate its ends and is essen−tially folded upon itself to be located within the container when the panel has been fully opened. B

42) Family number: 2360082 (CA1169372A) © PatBase

Title: EASY OPEN CAN END CONSTRUCTION AND METHOD OF MAKING SAME

Priority: CA19810384022 19810817

Family:

Publication number	Publication date	Application number	Application date
CA1169372 A1	19840619	CA19810384022	19810817

Probable Assignee: CVACHO DANIEL S

Assignee(s):(std)**:** CVACHO DANIEL S

Inventor(s):(std)**:** CVACHO DANIEL S

Agent(s): MACRAE AND CO

International class (IPC 8–9)**:** B65D17/28 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7)**:** B65D17/28

Classification Explorer

Abstract:
Source: CA1169372A An easy open can end construction and method of making it. The pull tab and tear strip remain fully locked onto the can end, and the opening strip does not dip into the beverage. Blend members positioned externally of the tear strip not only preserve a desired orientation of the pull tab with respect to the tear strip by also serve as a guard against the user's face or tongue contacting the raw edge left after lifting the tear strip. The tear strip itself is provided with one or more protective pads to protect the user's face. A sanitary cover member overlies the tear strip and is rolled up with the pull tab and tear strip becoming interlocked therewith. A method of making the score line pattern is included so that tearing occurs along a single side of the bottom of the score line pattern to avoid a zigzag tear pattern which is dangerous to the user's tongue or lips. Finally, a method of making a rivet is included in which two metal thickness are joined together to avoid a leaking problem encountered in single metal thickness rivets.

0) US2013246136A – DEVICE, SYSTEM AND METHOD FOR FACILITATING INTE...

43) Family number: 52839383 (US2013246136A) © PatBase

Title: DEVICE, SYSTEM AND METHOD FOR FACILITATING INTERACTION BETWEEN A WIRELESS COMMUNCATION DEVICE AND A PACKAGE

Priority: GB20120020373 20121112 US20120611222P 20120315 US20120612064P 20120316 US20130827003 20130314 WO2013US31359 20130314 US20160065207 20160309

Family:

Publication number	Publication date	Application number	Application date
CA2867453 AA	20140915	CA20132867453	20130314
CN104756146 A	20150701	CN201380025274	20130314
EP2826007 A2	20150121	EP20130713012	20130314
GB201220373 A0	20121226	GB20120020373	20121112
GB2507810 A1	20140514	GB20120020373	20121112
HK1206469 A1	20160108	HK20150106891	20150720
JP2015522856 T2	20150806	JP20150500612T	20130314
RU2014141503 A	20160510	RU20140141503	20130314
US2013246136 AA	20130919	US20130827003	20130314
US2016292697 AA	20161006	US20160065207	20160309
WO13138595 A2	20130919	WO2013US31359	20130314
WO13138595 A3	20140410	WO2013US31359	20130314
WO14072455 A2	20140515	WO2013EP73348	20131108
WO14072455 A3	20140731	WO2013EP73348	20131108

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING UK PLC ; CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC

Assignee(s): CROWN PACKAGING TECHNOLOGY INC11535 SOUTH CENTRAL AVENUEALSIPIL60803–2599US ; DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; MCGRILL LAURA JANE ; RAMSEY CHRISTOPHER PAUL ; MCGIRR LAURA JANE ; VAUGHAN LAURA JANE

Inventor(s):(std)**:** MCGIRR LAURA JANE ; MCGRILL LAURA JANE ; RAMSEY CHRISTOPHER PAUL ; VAUGHAN LAURA JANE ; VAUGHN LAURA JANE

Inventor(s): RAMSEY CHRISTOPHER PAULGB ; MCGRILL LAURA JANEGB ; MCGIRR LAURA JANEGB ; CHRISTOPHER PAUL RAMSEY ; LAURA JANE MCGIRR

Agent(s): GOWLING LAFLEUR HENDERSON LLP; LIND ROBERT; INO SARI; KURASAWA ICHIRO; MATSUSHITA MITSURU; DESHIMARU TAKESHI; KUMAKURA YOSHIO; FULLMER HAROLD H ET AL; RATLIFF ISMAY ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A63F13/00 A63F13/213 A63F13/216 B42D15/00 B65D1/12 B65D1/22 B65D17/00 B65D25/20 B65D41/12 B65D41/32 B65D85/00 G06F3/048 G06K19/06 G06K7/10 G06K7/14 G06Q10/08 G06Q20/32 G06Q30/00 G06Q30/02 G06Q30/06 H04W4/02 (Advanced/Invention); G06Q (Subclass/Invention)

CPC: B65D85/00 G06Q20/3276 G06Q30/02 B65D41/32 B42D15/00 B65D1/12 B65D1/22 B65D17/16 B65D17/24 B65D17/163 B65D17/165 B65D41/12 B65D2203/00 B65D2517/0052 B65D2517/0053 Y10T29/49 G09F3/0297 G06Q30/018 G06Q10/0835 H04W4/021 G06K19/06037 G06K7/10861 G06Q30/0643

US class: 206/459.1 235/375 29/592 463/29 705/14.12 705/26.7 705/27.1 705/306 705/317

Classification Explorer

Cited documents: WO13138595 A2, WO13049313 A2, WO12177077 A2, WO11107895 A1, WO05026017 A1, US8708221 BA, US6677967 BB, US6250554 BA, US6155409 A, US5939699 A, US2012219179 AA, US2012196661 AA, US2012172127 AA, US2012152781 AA, US2012085829 AA, US2011313918 AA, US2010315439 AA, US2010102117 AA, US2009319181 AA, US2009234731 AA, US2009089705 AA, US2007218980 AA, US2006181510 AA, US2005039092 AA, US2004104141 AA, US2002161640 AA, US2002056756 AA, JP3100125 U1, JP2011118600 A2, JP2011016546 A2, JP2011011454 A2, JP2010167571 A2, JP2009116525 A2, JP2006168735 A2, JP2005182416 A2, JP2005070725 A2, JP2004287037 A2, JP2004213629 A2, JP2003150745 A2, JP2002511696 T2, JP2002279268 A2, JP2002037420 A2, JP11248552 A2, GB2390592 A1, GB2354360 A1, EP1560009 A1,

DE102009027862 A1

CN101951592 A, CN101950200 A, CN101908155 A,

Forward Citations: WO15162729, WO14072455, WO14072455, US9665887, US9340368, US9259913, US2014019238, CN105691824, CN105600117, CN105501616,

Abstract:
Source: US2013246136A A method of providing a personalized experience on a wireless communication device corresponding to the contents of a package, the package containing a product may include the steps of reading a unique code on a package, the package containing a product, displaying a personalized illusory images on the wireless communication device, and altering the personalized illusory images in response to relative movement between the package and the camera.

0) US2003178397A – LASER ENGRAVED OPENING TAB

44) Family number: 14813649 (US2003178397A) © PatBase

Title: LASER ENGRAVED OPENING TAB

Priority: SE19980001489 19980428 US19990412362 19991005 US20000482620 20000114 US20000482616 20000114 US20030395102 20030325 WO1999SE00692 19990428

Family:

Publication number	Publication date	Application number	Application date
SE9801489 A0	19980428	SE19980001489	19980428
US2003178397 AA	20030925	US20030395102	20030325
US6476349 BA	20021105	US20000482620	20000114
US6479787 BA	20021112	US20000482616	20000114
US6926487 BA	20050809	US19990412362	19991005

Probable Assignee: REXAM AB

Assignee(s):(std)**:** PLM AB ; REXAM AB

Assignee(s): REXAM BOX AB ; PLM DJAKNEGATAN AB

Inventor(s):(std)**:** JENDICK MANFRED

Inventor(s): MANFRED JENDICK

Agent(s): NIXON AND VANDERHYE PC

International class (IPC 8–9)**:** B21C47/34 B21C51/00 B23K26/08 (Advanced/Invention); B21C47/34 B21C51/00 B23K26/08 (Core/Invention); B65D (Subclass/Invention)

International class (IPC 1–7)**:** B21D51/44 B23K26/00 B23K9/12 B65H23/16

CPC: B21C47/34 B21C51/005 B23K26/0846 B23K2201/007

European class: B21C47/34 B21C51/00B B23K26/08E2B L23K201/00R

US class: 219/121.68 219/121.680S 219/121.69 219/121.690P 219/121.75 219/121.82 219/79 242/615.1 413/25 413/8

Classification Explorer

Cited documents: WO9909853 A2, WO9853949 A1, WO9747397, WO9711288 A1, WO9504342 A2, WO9308541, WO9304943 A1, WO0168460 A2, WO0003832 A1, USRE35446 E, USD289017 S1, USD268250 S1, USD261364 S1, USD210870 S1, US6872913 BA, US6501046 BA, US6498318 BA, US6489985 BA, US6479787 BA, US6476349 BA, US6433302 BA, US6373876 BA, US6326586 BA, US6202880 BA, US6163010 A, US6160835 A, US6140606 A, US6111907 A, US6105806 A, US6080958 A, US6053349 A, US6002098 A, US5967726 A, US5906760 A, US5863017 A, US5855969 A, US5854805 A, US5837962 A, US5817243 A, US5813782 A, US5799815 A, US5782024 A, US5751436 A, US5719372 A, US5718457 A, US5698119 A, US5660747 A, US5660516 A, US5653900 A, US5649363 A, US5635900 A, US5612525 A, US5609778 A, US5609043 A, US5593606 A, US5578120 A, US5570384 A, US5552574 A, US5523125 A, US5511920 A, US5492077 A, US5465780 A, US5416951 A, US5401979 A, US5359766 A, US5359176 A, US5331443 A, US5329090 A, US5315108 A, US5262613 A, US5248878 A, US5235454 A, US5215864 A, US5206496 A, US5202199 A, US5191695 A, US5170279 A, US5125780 A, US5112695 A, US4998641 A, US4970600 A, US4965829 A, US4940880 A, US4922077 A, US4910739 A, US4880137 A, US4765532 A, US4675500 A, US4635545 A, US4578329 A, US4564739 A, US4530631 A, US4517638 A, US4517436 A, US4485935 A, US4476781 A, US4465204 A, US4459910 A, US4431124 A, US4405852 A, US4393411 A, US4380129 A, US4375025 A, US4363179 A, US4331256 A, US4323755 A, US4323317 A, US4322016 A, US4304981 A, US4219127 A, US4203240 A, US4184607 A, US4024545 A, US3958354 A, US3898417 A, US3866398 A, US3863823 A, US3858122 A, US3854647 A, US3825151 A, US3822496 A, US3796344 A, US3704614 A, US3701880 A, US3692223 A, US3627858 A, US3626141 A, US3549733 A, US3471641 A, US3281024 A, US3182994 A, US3087665 A, US3001787 A, US2648278 A, US2641998 A, US2003015507 AA, JP9208095, JP9192870, JP8175006, JP8053121 A2, JP77053099, JP7053099 A2, JP63252746, JP63020591, JP61086305 A2, JP58187091 A2, JP5178346, JP2020684, JP11216589, JP11058050, JP11006086, JP10113786, GB2320008 A1,

GB2185613 A1, GB1124958, FR2750396, FR2649628, EP0618037 A1, EP0564639 A1, EP0482776 A1, EP0377915 A2, EP0289022 A2, EP0208175 A2, EP0085484 A1, EP0040929 A1, EP0040922 A1, DE8900453 U, DE8900453 A1, DE4435531 A1, DE4405203 A1, DE4339321 A1, DE4338774 A1, DE4322252 A1, DE4143339 A1, DE4106151 A1, DE4103746, DE3822097 A1, DE29816109 U1, DE29816109, DE2981610, DE2052512 A1, DE19840934 A1, DE19701547, DE19639619 A1, DE19607621 A1, CA2232871 AA, CA2168435 AA, AU8179494 A1,

Forward Citations: WO16146875, WO15199046, WO14028360, WO14028360, WO13158771, WO08070979, WO07044798, USD625184, US9637267, US9592569, US9278776, US9187221, US9186924, US9007413, US8844747, US8146768, US8008598, US7903336, US6926487, US6926456, US6872913, US6808351, US6686694, US2013319066, US2011226636, US2011084051, US2010193519, US2010119784, US2010084382, US2007240325, US2007056932, US2006140746, US2006012821, US2005045637, US2004058238, GB2444018, GB2444018, DE112006002720, CN104703746,

Abstract:
Source: US2003178397A In a method of manufacturing articles to be included in cans, a metal strip (1) is fed to an article forming unit (11), in which it is punched and stamped to form the articles. Before the article forming operations, the strip (1) is provided with laser engravings on one of its upper and lower surfaces, or on both these surfaces. The laser engravings form indicative marks on the articles. In addition to the article forming unit (11), an apparatus for manufacturing such articles has a metal strip supply (8), means (13) for feeding the strip (1) and a laser unit (9) for providing the indicative laser engraved marks on the articles.

0) US2006280846A – FOOD CONTAINER

45) Family number: 33994524 (US2006280846A) © PatBase

Title: FOOD CONTAINER

Priority: US20050136400 20050525

Family:

Publication number	Publication date	Application number	Application date
US2006280846 AA	20061214	US20050136400	20050525
US7563495 BB	20090721	US20050136400	20050525

Probable Assignee: KRAFT FOODS GROUP BRANDS LLC

Assignee(s):(std)**:** KRAFT FOODS GLOBAL BRANDS LLC ; KRAFT FOODS HOLDINGS INC

Assignee(s): KRAFT FOODS GROUP BRANDS LLC

Inventor(s):(std)**:** ANELLI MATTHEW

Agent(s): FITCH EVEN TABIN AND FLANNERY

International class(IPC 8–9)**:** B31B45/00 B32B1/08 B65D75/38 B65D85/00 (Advanced/Invention); B31B45/00 B32B1/00 B65D75/38 B65D85/00 (Core/Invention)

CPC: Y10T428/13 Y10T428/1317 B65D17/163 B65D25/16

European class: B65D17/16B1 B65D25/16

US class: 426/122 428/34.1 428/34.6

Classification Explorer

Cited documents: US6076693 A, US5236102 A, US5069356 A, US5052573 A, US4982867 A, US4555339 A, US4538758 A, US4535909 A, US4459793 A, US4406378 A, US4321922 A, US4311255 A, US4142453 A, US3627166 A, US3347411 A, US3318495 A, US3285461 A, US3159303 A, US3144167 A, US2760430 A, US2331901 A, US2094600 A, US2005115975 AA, US2004105917 AA, US2003197016 AA, US2003121233 AA, US2003024930 AA, US1680882 A, US1335383 A, EP0122336 A1,

Forward Citations: USD669777, US9604769, US9463894, US9145251, US8151992, US2014117025, US2013292394, US2013062400, US2010206763, ITBO20130154,

Abstract:
Source: US2006280846A A food container is provided which releases food contents thereof more easily and effectively. The food container includes an insert inserted into a metallic can before food product is filled therein and attachment of a closure end, where the insert provides an effective aid to product release by reducing or eliminating vacuum effects caused by hot–filling and cooling of the food product and/or wall adhesion effects between the food product and food container.

0) US6126034A – LIGHTWEIGHT METAL BEVERAGE CONTAINER

46) Family number: 12572814 (US6126034A) © PatBase

Title: Lightweight metal beverage container

Priority: US19980074826P 19980217 US19990251504 19990217

Family:

Publication number	Publication date	Application number	Application date
US6126034 A	20001003	US19990251504	19990217

Probable Assignee: ALCAN ALUMINUM CORP

Assignee(s):(std)**:** ALCAN ALUMINUM CORP

Assignee(s): BANK OF AMERICA NA ; BANK OF AMERICA NATIONAL ASSOCIATION ; CITICORP NORTH AMERICA INC ; LASALLE BUSINESS CREDIT LLC ; NOVELIS CORP ; UBS AG ; NOVELIS INC ; UBS STAMFORD BRANCH AG

Inventor(s):(std)**:** BORDEN CRAIG L ; BROWN MCKAY C ; GILLEST EDMUND T ; LIEB DAVID P

International class (IPC 8–9)**:** B65D1/42 B65D8/12 (Advanced/Invention); B65D1/40 B65D8/04 (Core/Invention)

International class (IPC 1–7)**:** B65D8/12

CPC: B65D1/42 B65D7/12 B65D7/36

European class: B65D1/42 B65D7/12 B65D7/36

US class: 206/509 220/670 220/671

Classification Explorer

Cited documents: US941720 A, US5595322 A, US5339975 A, US5279442 A, US5261558 A, US4723681 A, US4685582 A, US4111328 A, US3265310 A, US3168777 A, US2152245 A,

Forward Citations: WO09097678, WO03059764, USD787952, USD698668, US9663846, US9566634, US9517498, US9371152, US8931660, US8727169, US8505765, US8341995, US8313004, US8235244, US8205477, US7938290, US7748563, US7743635, US7673768, US7506779, US7500376, US7380684, US7341163, US7100789, US6761280, US6748789, US6736283, US6702142, US6561004, US6499622, US2015355064, US2012292329, US2009193869, US2005006395, US2004211786, US2004140312, US2004074911, AU2003207518,

Abstract:
Source: US6126034A Lightweight beverage containers disclosed herein require less metal per container, exhibit less earing and have one or more of the following features: 1) a reduced seam between the can end and the can body, 2) a side wall having vertically disposed alternating portions of relatively thicker and relatively thinner metal, 3) a can end dimensioned to fit within the domed bottom of a vertically adjacent similar can when stacked, 4) a can body produced from an acircular blank dimensioned to produce said can body without ears, and 5) a can body produced from a cup having a variable radius between the side of said cup and the bottom thereof.

47) Family number: 2245439 (US4688395A) © PatBase

Title: Self–contained cooling device for food containers

Priority: US19850783664 19851003 US19850881386 19860701 US19860881386 19860701 WO1986US02073 19861002

Family:

Publication number	Publication date	Application number	Application date
AU198664095 A1	19870424	AU19860064095	19861002
AU582527 B2	19890323	AU19860064095	19861002
AU6409586 A1	19870424	AU19860064095D	19861002
BRPI8606900 A	19871103	BR1986PI06900	19861002
DK281887 A	19870602	DK19870002818	19870602
DK281887 A0	19870602	DK19870002818	19870602
EP0239627 A1	19871007	EP19860906199	19861002
EP0239627 A4	19871123	EP19860906199	19861002
FI872405 A	19870529	FI19870002405	19870529
FI872405 A0	19870529	FI19870002405	19870529
JP6100407 B4	19941212	JP19860505285	19861002
JP63501656 T2	19880623	JP19860505285T	19861002
JP63501656 T2	19880623	JP19860505285	19861002
NO872172 A	19870525	NO19870002172	19870525
NO872172 A0	19870525	NO19870002172	19870525
US4688395 A	19870825	US19860881386	19860701
WO8702123 A1	19870409	WO1986US02073	19861002

Probable Assignee: SUPERIOR MARKETING RESEARCH CORP A CORP OF UTAH

Assignee(s):(std)**:** SUPERIOR MARKETING RES CO ; SUPERIOR MARKETING RES CORP ; SUPERIOR MARKETING RESEARCH CO

Assignee(s): SUPERIOR MARKETING RESEARCH CORP ; SUPERIOR MARKETING RESEARCH CORP A CORP OF UTAH

Inventor(s):(std)**:** HOLCOMB ROBERT R

Inventor(s): ROBERT R HOLCOMB

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD

Designated states: AT AU BE BR CH DE DK FI FR GB IT JP KR LI LU NL NO SE

International class (IPC 8–9): F25D3/10 F25D7/00 (Advanced/Invention); F25D7/00 (Core/Invention); A47G F25D (Subclass/Invention)

International class (IPC 1–7): A47G F25D3/10 F25D7/00

CPC: F25D3/107 F25D2331/805 F25D2331/808

European class: F25D3/10C R25D331/805 R25D331/808

US class: 62/294 62/457.2 62/457.9

Classification Explorer

Cited documents: US4319464 A, US3987643 A, US3919856 A, US3862548 A, US3852975 A, US3842617 A, US3759060 A, US3726106 A, US3696633 A, US3636726 A, US3597937 A, US3525236 A, US3494143 A, US3494141 A, US3379025 A, US3320767 A, US3309890 A, US3269141 A, US2746265 A, US2460765 A, US2082381 A, FR2223986 A6, EP0118735 A2, AU28599, AU28599,

Forward Citations: WO9627110, WO9315960, WO9315960, WO14039388, WO07074329, WO03042610, USD781356, US9039924, US8016150, US7390341, US7240507, US6854280,

US6722153, US6530235, US6102108, US5692391, US5655384, US5609038, US5555741, US5394703, US5325680, US5214933, US5201183, US4941328, US2015204602, US2010251731, US2009266737, US2007175233, US2005039485, US2004261380, GB2333586, GB2313436, GB2290131, FR2832495, FR2810021, FR2692661, EP1164341, EP0632877,

Abstract:
Source: US4688395A A self−contained cooling device for use in a container such as a food container to cool the contents of the container at any desired time includes a reservoir containing pressurized fluid. The reservoir is secured to the inside of the container to form an expansion chamber between the reservoir and the container. A tube communicates with the reservoir and extends into the expansion chamber, the tube normally being closed to prevent escape of pressurized fluid from the reservoir. When it is desired to cool the contents of the container the tube is opened so that pressurized fluid from the reservoir expands into the expansion chamber thereby cooling the expansion chamber, reservoir, and contents of the container. Embodiments of the device shown specifically are adapted to be used with commonly used "pop−top" beverage cans and in such instance the tube extends to securement with the tab used to operate the "pop−top" or with a separate tab, and operation of the tab causes opening of the tube in the expansion chamber. The device may be secured to the end of the normal "pop−top" can and the reservoir is generally conical in configuration, so can easily be inserted into the filled beverage can by high speed canning equipment as the end is placed on the can and sealed. A further embodiment of the device is shown specifically adapted for use and reuse in an insulated food container.

48) Family number: 31450352 (US2007177962A) © PatBase

Title: METHOD AND DEVICE FOR THE PRODUCTION OF A CAN BODY, AND CAN BODY

Priority: CH20030001140 20030627 CH20040000054 20040115 CH20050000016 20050114 WO2005CH00341 20050617 US20050629472 20050617 EP20040736969 20040617 WO2005CH00016 20050114 WO2004CH00368 20040617 EP20050700311 20050114 WO2006CH00031 20060114

Family:

Publication number	Publication date	Application number	Application date
AT474689 E	20100815	AT20050750490T	20050617
AT487551 E	20101115	AT20040736969T	20040617
AT504369 E	20110415	AT20060700203T	20060114
BRPI0506878 A	20070612	BR2005PI06878	20050114
BRPI0512117 A	20080206	BR2005PI12117	20050617
BRPI0606325 A2	20090616	BR2006PI06325	20060114
DE502004011875 D1	20101223	DE200450011875T	20040617
DE502005009965 D1	20100902	DE200550009965T	20050617
DE502006009246 D1	20110519	DE200650009246T	20060114
EA008857 B1	20070831	EA20060001323	20050114
EA009223 B1	20071228	EA20070000053	20050617
EA010537 B1	20081030	EA20070001509	20060114
EA200601323 A1	20070227	EA20060001323	20050114
EA200700053 A1	20070427	EA20070000053	20050617
EA200701509 A1	20071228	EA20070001509	20060114
EP1644145 A1	20060412	EP20040736969	20040617
EP1644145 B1	20101110	EP20040736969	20040617
EP1713612 A2	20061025	EP20050700311	20050114
EP1713612 B1	20130320	EP20050700311	20050114
EP1755818 A1	20070228	EP20050750490	20050617
EP1755818 B1	20100721	EP20050750490	20050617
EP1838473 A1	20071003	EP20060700203	20060114
EP1838473 B1	20110406	EP20060700203	20060114
ES2349299 T3	20101229	ES20050750490T	20050617
ES2356328 T3	20110407	ES20040736969T	20040617
ES2364422 T3	20110902	ES20060700203T	20060114
ES2415108 T3	20130724	ES20050700311T	20050114
JP2007521963 T2	20070809	JP20060548065T	20050114
JP2008502541 T2	20080131	JP20070515761T	20050617
JP2008526519 T2	20080724	JP20070550653T	20060114
JP5150252 B2	20130220	JP20070515761T	20050617
JP5295569 B2	20130918	JP20070550653T	20060114
JP5313451 B2	20131009	JP20060548065T	20050114
PT1644145 T	20110204	PT20040736969T	20040617
PT1713612 T	20130531	PT20050700311T	20050114
PT1755818 T	20101021	PT20050750490T	20050617
SI1644145 T1	20110331	SI20040031590T	20040617
SI1713612 T1	20130830	SI20050031736T	20050114
US2007177962 AA	20070802	US20040562035	20040617
US2008050205 AA	20080228	US20050585996	20050114

US2008164241 AA	20080710	US20050629472	20050617	
US2009003972 A9	20090101	US20040562035	20040617	
US2009008429 AA	20090108	US20060795260	20060114	
US7584639 BB	20090908	US20040562035	20040617	
US7670094 BB	20100302	US20050585996	20050114	
US7971771 BB	20110705	US20060795260	20060114	
US9365344 BB	20160614	US20050629472	20050617	
WO05000498 A1	20050106	WO2004CH00368	20040617	
WO05068127 A2	20050728	WO2005CH00016	20050114	
WO05068127 A3	20051215	WO2005CH00016	20050114	
WO05123323 A1	20051229	WO2005CH00341	20050617	
WO06074570 A1	20060720	WO2006CH00031	20060114	

Probable Assignee: CREBOCAN AG

Assignee(s):(std)**:** BOLTSHAUSER WERNER ; CAPROSOL AG ; CREBOCAN AG

Inventor(s):(std)**:** BOLTHAUSER WERNER ; BOLTSHAUER WERNER ; BOLTSHAUSER WERNER

Inventor(s): WERNER BOLTSHAUER ; WERNER BOLTSHAUSER

Agent(s): BUECHEL VON REVY AND PARTNER; ROEB MARIA; HARNESS DICKEY AND PIERCE PLC; HARNESS DICKEY AND PIERCE

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B21C37/08 B21C37/09 B21D39/03 B21D51/26 B21D51/30 B21D51/46 B23D21/04 B23K1/20 B23K26/00 B23K26/20 B23K26/28 B23K31/02 B23K33/00 B26D3/16 B65B7/28 B65D8/04 B65D8/16 B65D8/18 B65D8/22 B65D83/14 B65D83/38 (Advanced/Invention); B23K101/12 B65D83/42 (Advanced/Non–invention);
B21C37/08 B21D39/03 B21D51/00 B21D51/26 B21D51/30 B21D51/38 B23D21/00 B23K1/20 B23K26/00 B23K31/02 B23K33/00 B26D3/16 B65D8/04 B65D83/14 (Core/Invention)

International class (IPC 1–7): B21C37/08 B21D51/26 B23K26/28 B23K33/00 B65D83/14

CPC: B23K26/206 B65D7/04 B65D7/38 B65D7/46 Y10T29/49828 Y10T29/49904 Y10T29/49986 Y10T29/53322 B21C37/09 B21D51/2646 B21D51/2669 B23K26/32 B23K2203/50 B23K33/006 B21D51/2676 B23K26/28 B23K2201/12 B21D51/2653 B65B7/28 B23D21/04 B65D83/38 B21D51/26 B23K26/282 B23K2201/125 B23K2203/04 B23K2203/10 B65D83/42 Y10T428/12493 B23K2201/34 B23K2203/08

European class: B21C37/09 B21D51/26 B21D51/26C B21D51/26E B21D51/26L B23D21/04 B23K26/20D B23K26/28 B23K26/28B B23K26/32D B23K26/32L2 B23K33/00B2 B65D7/04 B65D7/38 B65D7/46 B65D83/38 L23K201/12 L23K201/12B L23K201/34 L23K203/04 L23K203/10 L65D83/42

US class: 1/1 219/121.64 219/121.640P 220/23.91 220/23.910S 220/612 220/669 220/669S 220/678 228/13 228/13S 228/160 228/160P 29/429 29/429S 29/469 29/469S 29/527.4 29/527.400S 29/773 413/1 413/12 413/12S 413/19 413/19S 413/1P 413/2 413/26 413/2P 413/2S 413/3 413/4 413/69 413/69S 413/74 413/8 413/8P 428/615 428/615S 72/379.4 72/58

Classification Explorer

Cited documents: WO9534474 A1, WO05068127 A2, WO05000498 A1, WO0242196 A2, WO02092466 A1, WO0202257 A1, WO0035772 A1, US7670094 BB, US7584639 BB, US7584639 B1, US6581401 BA, US6389866 BA, US5997232 A, US5511826 A, US5313862 A, US5186592 A, US5170684 A, US5111721 A, US5086677 A, US5060367 A, US4905858 A, US4889023 A, US4694137 A, US4615470 A, US4591405 A, US4467171 A, US4341943 A, US4315132 A, US4199851 A, US4095544 A, US3548564 A, US3526186 A, US3337944 A, US244465 A, US2444465 A, US2008164241 AA, US2007177962 AA, US2005167091 AA, US2005166979 AA, US2004188394 AA, JP9290318 A2, JP9253763 A2, JP9133293 A2, JP9011329 A2, JP7223111 A2, JP7032176 A2, JP63032129 U1, JP63032129 U, JP62171424 U1, JP62171424 U, JP60165282 A2, JP47036529 Y1, JP42000443 B4, JP42000443 B1, JP38015843 B1, JP3022557 U1, JP2004345694 A2,

JP2004195483 A2, JP2003293105 A2, JP2003214539 A2, JP2003146333 A2, JP2003081265 A2, JP2002532347 T2, JP2001354295 A2, JP1100614 U1, JP10305338 A2, JP10129660 A2, JP10113716 A2, JP10094848 A2, JP10082500 A2, GB878713 A, FR2543923 A1, FR1599934 A, EP1153837 A1, EP0853515 B1, EP0853515 A1, EP0853514 B1, EP0853514 A1, EP0853513 B1, EP0853513 A1, EP0666124 B1, EP0666124 A1, EP0547754 A2, EP0525729 A1, EP0397558 A1, EP0208564 A1, EP0200098 A2, DE2456097 A1, DE19834400 C1, DE19716079 A1, DE1452556 A1,

Forward Citations: WO14074895, WO12135968, WO12019313, WO11116485, WO11116485, WO11094879, WO10063132, WO09155721, WO09015498, WO08002741, WO06074570, WO05123323, WO05068127, USD787952, USD698668, US9382034, US9365344, US9327338, US9227480, US9126257, US9038864, US8978922, US8764070, US8555692, US8322183, US8257577, US8240185, US7971771, US7954354, US7934410, US7726165, US7670094, US7584639, US2016354831, US2013306659, US2013251551, US2013219720, US2013216298, US2012247166, US2012024911, US2011203677, US2011167889, US2011114650, US2010263431, US2010206891, US2010199741, US2009008429, US2008277282, US2008164241, US2008022746, US2007295051, KR101301488, JP2011525458, GC3212, EP2366472, EP2359954, EA9223, EA8857, EA10537, EA019326, EA018405, EA010537, EA009223, EA008857, DE102010038151, DE102008003211, DE102008003211, CN105478524, CN104271958, CN103691832,

Abstract:
Source: US2007177962A A can body with a jacket−like closed wall and a base constructed on one end of the can wall includes an external base covering in the form of a sheet material. The base covering is fixed into position on an annular connection region of the can body. The base covering can form a basically flat imprintable region in a main region that is surrounded by the connection region. If a bar code can be applied in this imprintable region, then a restriction of the configuration possibility of the can wall disappears. The base covering can form a stand region whereby a standing can body is only in contact with the support surface if necessary via the base covering, and consequently the occurrence of corrosion problems is prevented. A retaining device that leaves the base of a held can body free and a position fixing apparatus are used for fixing the base covering into position. A decorative foil on the exterior of the can wall can be overlapped by the base covering, which serves to prevent a detachment of the decorative foil on the base.

0) US3889844A – CAN CLOSURE

49) Family number: 1147431 (US3889844A) © PatBase

Title: Can closure

Priority: US19730393001 19730830 US19750540980 19750114

Family:

Publication number	Publication date	Application number	Application date
AU197472776 A1	19760311	AU19740072776	19740829
AU472220 B2	19760520	AU19740072776	19740829
BR7407245 A0	19750909	BR19740007245	19740830
DE2441490 A1	19750320	DE19742441490	19740829
DK444174 A	19750428	DK19740004441	19740820
FR2242302 A1	19750328	FR19740029489	19740829
FR2242302 B3	19770617	FR19740029489	19740829
GB1477862 A	19770629	GB19740037901	19740829
JP50050184 A2	19750506	JP19740099438	19740829
NL7411089 A	19750304	NL19740011089	19740820
US3889844 A	19750617	US19730393001	19730830
US3964415 A	19760622	US19750540980	19750114

Probable Assignee: MINNESOTA MINING AND MFG

Assignee(s):(std): MINNESOTA MINING AND MFG

Assignee(s): MINNESOTA MINING AND MFG CO ; MINNESOTA MINING MANUFACTURING ; MINNESOTA MINING MANUFACTURING US ; MINNESOTA MINING MFG CO ; MINNESOTA MINING AND MANUFACTURING CO ; MINNESOTA MINING AND MANUFACTURING CO SAINT PAUL MINN V ST A ; MINNESOTA MINING AND MANUFACTURING COMPANY ; MINNESOTA MINING AND MANUFACTURING COMPANY TE SAINT PAUL MINNESOTA VER ST V AM

Inventor(s):(std): KROPP W ; KROPP W E ; KROPP WILLIAM E ; KROPP WILLIAM EDUARD ; KROPP WILLIAM EDWARD ; VIKER H ; VIKER H W ; VIKER HARRIS W ; VIKER HARRIS WARREN

Inventor(s): WILLIAM EDWARD KROPP ; HARRIS WARREN VIKER

International class (IPC 8–9): B21D51/38 B65D17/50 (Advanced/Invention); B21D51/38 B65D17/00 (Core/Invention)

International class (IPC 1–7): B21D22/02 B21D51/44 B65D1/12 B65D17/02 B65D17/06 B65D17/16 B65D17/22 B65D17/24 B65D41/00 B65D47/06 B65D53/08 B65D7/04 B65D85/72

CPC: B21D51/383 B65D17/505 B65D17/506 B65D2517/0013 B65D2517/007 B65D2517/0094 B65D2517/5083

European class: B21D51/38B B65D17/50A3 B65D17/50B L65D517/00Y2B L65D517/00Y7B1 L65D517/00Y8B L65D517/50Q5

US class: 220/359 220/359.1 222/541.1 222/541.9 229/123.1 413/22 413/25

Classification Explorer

Cited documents: US564492 A, US3547305 A, US3441167 A, US3397811 A, US3331422 A, US3292828 A, US3281024 A, US3251515 A, US3217951 A, JP47031990 A2, JP46029508 U1,

Forward Citations: WO0200512, US6403003, US5514442, US5433992, US5067614, US5012946, US5004111, US4934544, US4684043, US4372460, US4332846, US4165004, US3990615, US2008302752, US2003062370, JP2008522828, GB2157644, EP0966388,

Abstract:
Source: US3889844A Cans sealed with removable pressure–sensitive adhesive tape tabs over a pour hole successfully contain carbonated beverages or other pressure–generating liquids if the area around the pour hole and under the tape is slightly elevated, thereby putting the tape in shear rather in peel. Circular can ends may be provided with a circular pour hole, taped and then shaped to impart a frusto–conical area around the pour hole before being crimped over the tubular can body.

0) US4781303A – CONTAINER WITH A NON–REMOVABLE OPENING TAB APPA...

50) Family number: 2578654 (US4781303A) © PatBase

Title: Container with a non–removable opening tab apparatus

Priority: US19880173600 19880325

Family:

Publication number	Publication date	Application number	Application date
US4781303 A	19881101	US19880173600	19880325

Probable Assignee: WELLS ROBERT A

Assignee(s):(std)**:** WELLS ROBERT A

Inventor(s):(std)**:** WELLS ROBERT A

International class (IPC 8–9): B65D17/34 B65D41/32 (Advanced/Invention); B65D17/28 B65D41/32 (Core/Invention)

International class (IPC 1–7): B65D41/32

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/269

Classification Explorer

Cited documents: US4148409 A, US4039100 A, US3977561 A,

Forward Citations: WO9109784, US5145086, EP0372419,

Abstract:
Source: US4781303A An easy–opening container of the type commonly used to contain beverages has an end wall that includes a score line and a hinge line with the score and hinge lines together defining a partially separable panel section of the end wall. A pull tab has a ring–shaped lift portion at one end, a finger at its other end and a mounting portion intermediate its ends. The pull tab is mounted at its mounting portion to the end wall adjacent the panel section with the lift portion extending from the mounting portion to overlie and partially frame the panel section and with the finger extending away from the panel section to overlie a portion of the end wall. A locking flange depends from the lift portion to lie in confronting relationship with at least a portion of the periphery of the panel section. The finger is constructed and arranged to engage a portion of the end wall upon movement of the lift portion away from the end wall at least partially separating the panel section from the end wall to define an opening therein. The flange is constructed and arranged to move into locking engagement with the edges defining the opening upon subsequent movement of the lift portion toward the end wall so that the pull tab is maintained in a fixed orientation atop the end wall framing the opening.

0) US5785170A – BEVERAGE CAN TRAY WITH IMPROVED HANDLING FEATUR...

51) Family number: 12331645 (US5785170A) © PatBase

Title: Beverage can tray with improved handling features

Priority: US19960590146 19960123 US19970889267 19970708 US19980111319 19980707

Family:

Publication number	Publication date	Application number	Application date
US5785170 A	19980728	US19970889267	19970708
US6079554 A	20000627	US19980111319	19980707

Probable Assignee: INT CONTAINER SYSTEMS INC

Assignee(s):(std): INT CONTAINER SYSTEMS INC

Assignee(s): INTERNATIONAL CONTAINER SYSTEMS INC ; STATE STREET BANK AND TRUST CO ; INTERTAPE POLYMER CORP ; INTERTAPE POLYMER US INC ; IPG FINANCIAL SERVICES INC ; IPG HOLDINGS LP ; IPG US HOLDINGS INC ; IPG US INC ; POLYMER INT CORP ; WELLS FARGO BANK NATIONAL ASSOCIATION ; BANK OF AMERICA NA ; BANK OF AMERICA NA AGENT AS

Inventor(s):(std): HAMMETT ROY ; HEILMAN DOUGLAS H

International class (IPC 8–9): B65D71/70 (Advanced/Invention)

International class (IPC 1–7): B65D75/00

CPC: B65D71/70

European class: B65D71/00E B65D71/70

US class: 206/203 206/509 220/516

Classification Explorer

Cited documents: WO9117097 A1, USD347722, USD330621, USD329932, USD322917, USD317670, USD208111, US5501352 A, US5495945 A, US5487487 A, US5405042 A, US5316172 A, US5305884 A, US5287966 A, US5285899 A, US5277316 A, US5230601 A, US5188233 A, US5184748 A, US5115937 A, US5105948 A, US5060819 A, US5031774 A, US5031761 A, US4944400 A, US4932532 A, US4928841 A, US4899874 A, US4834243 A, US4789063 A, US4700837 A, US4700836 A, US4625908 A, US4615444 A, US4410099 A, US4373627 A, US4344530 A, US4319685 A, US4204617 A, US4162738 A, US4161259 A, US3791549 A, US3638824 A, US3391815 A, US3391814 A, US3369659 A, US3351264 A, US3349943 A, US3334767 A, US3333727 A, US3155268 A, US3151762 A, US3092284 A, US3009579 A, US2965226 A, US2215252 A, GB2032886 A1, GB1330778 A, GB1197058 A, GB1152038 A, FR1474782 A,

Forward Citations: WO10055204, WO03000006, WO03000006, WO02081324, USD770273, USD759478, USD750975, USD749323, USD747962, USD746675, USD746131, USD743784, USD742218, USD741707, USD741706, USD741705, USD738205, USD730726, USD615758, USD551036, USD516914, USD505014, USD494867, USD487634, USD485756, USD466018, USD465417, USD462522, USD445253, US9586722, US9567133, US9475602, US9428321, US9321572, US9174760, US9114901, US8893891, US8757420, US8636142, US8607971, US8448806, US8353402, US8328009, US8123034, US8109408, US7658278, US7604122, US7549539, US7322475, US7281641, US7207458, US7017746, US6899225, US6892885, US6237758, US6047844, US6021913, US6006912, US2013177381, US2012205263, US2011056861, US2010084297, US2009223854, US2009152158, US2006169620, US2005279651, US2005269239, US2005230281, US2005040069, US2004149611, US2003070957, EP2719631, EP2450285, EP2352686, EP1502020, EP1502020, AU2005201944, AU2002322101,

Abstract:
Source: US5785170A A beverage can tray floor has a plurality of redoubts on its bottom surface for cooperation with the rims of cans in a sub−adjacent tray to impede free sliding movement of an upper tray over the rims of cans in a sub−adjacent tray, while enabling the upper tray to be slid over the cans in the lower tray. The redoubts include at least one elongate, tapered redoubt that extends in spanning relationship to the rim of a can to facilitate initial lateral sliding movement. The tray also has peripheral heel protector bands extending around a bottom portion thereof to protect the heels of cans, and upstanding can spacer members between can seating areas to maintain cans in the tray spaced from one another and prevent displacement of the cans from their seating areas

when the tray is tilted. The sidewall includes a plurality of spaced pillars extending upwardly from the floor and supporting a peripheral top rail. The pillars are omitted and/or shortened in some areas to provide smooth, uninterrupted portions of the top rail which serve as handles. Spaces are defined between the upper ends of at least some of the pillars and the top rail, and upwardly projecting tabs on the upper ends of some of the pillars extend into the spaces when the trays are stacked to prevent wedging of the trays.

0) US2014263327A – CONTAINER END CLOSURE WITH BUCKLE CONTROL FEATU...

52) Family number: 57414587 (US2014263327A) © PatBase

Title: CONTAINER END CLOSURE WITH BUCKLE CONTROL FEATURE

Priority: US20130073492 20131106 US20130798301P 20130315 WO2014US18866 20140227

Family:

Publication number	Publication date	Application number	Application date
CA2904576 AA	20150908	CA20142904576	20140227
CN105164020 A	20151216	CN201480024857	20140227
EP2969800 A1	20160120	EP20140768837	20140227
EP2969800 A4	20170405	EP20140768837	20140227
MX2015012990 A1	20160510	MX20150012990	20140227
RU2015144178 A	20170427	RU20150144178	20140227
US2014263327 AA	20140918	US20130073492	20131106
US9114451 BB	20150825	US20130073492	20131106
WO14149485 A1	20140925	WO2014US18866	20140227

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP

Assignee(s): CHASTEEN HOWARD C ; JACOBER MARK A

Inventor(s):(std)**:** CHASTEEN HOWARD C ; JACOBER MARK A

Inventor(s): MARK A JACOBER ; HOWARD C CHASTEEN

Agent(s): SMART AND BIGGAR; EISENFUEHR SPEISER; SHERIDAN ROSS PC; PEARSON KENDRIA E

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/44 B65D17/00 B65D17/34 B65D6/30 (Advanced/Invention)

CPC: B21D51/44 B65D17/165 B65D2517/0014 B65D2517/0068 B65D2517/0074 B65D2517/0089 Y10T29/49863

US class: 1/1 220/269 29/446

Classification Explorer

Cited documents: WO12143322 A1, WO03039785 A1, US8851323 BB, US8496132 BB, US8328492 BB, US8157119 BB, US7926675 BB, US7591392 BB, US7370774 BB, US7107928 BB, US6908005 BA, US6089072 A, US6077554 A, US5829623 A, US5598734 A, US5590807 A, US4928844 A, US4796772 A, US4577774 A, US4535909 A, US4503989 A, US4394927 A, US4132328 A, US2013306658 AA, US2011297679 AA, JP63303639 A2, JP6179443 A2, JP5112357 A2, JP4666327 A2, JP2002239662 A2, JP2002145263 A2, JP2000159229 A2, EP0663346 A1,

Forward Citations: USD762114, USD750488, US9446879, US9233784, US2016031613, US2013118133,

Abstract:
Source: US2014263327A An end closure for food and beverage containers is provided. The end closure comprises a central panel portion having an induced buckle coin and an interrupted panel coin positioned proximate to an inner panel wall to control the buckling location on the end closure. Thus, the end closure will buckle at a predetermined location away from the score and tear panel to avoid catastrophic failure and container leakage.

0) US5482158A – PROMOTIONAL DEVICE FOR DELIVERING A PRIZE FROM ...

53) Family number: 8663278 (US5482158A) © PatBase

Title: PROMOTIONAL DEVICE FOR DELIVERING A PRIZE FROM A BEVERAGE CAN

Priority: US19940347091 19941123 WO1995US15094 19951117

Family:

Publication number	Publication date	Application number	Application date
AT232821 E	20030315	AT19950941431T	19951117
AU199642854 A1	19960617	AU19960042854	19951117
AU685341 B2	19980115	AU19960042854	19951117
DE69529683 D1	20030327	DE19956029683	19951117
DE69529683 T2	20031023	DE19956029683T	19951117
EP0792242 A1	19970903	EP19950941431	19951117
EP0792242 B1	20030219	EP19950941431	19951117
JP10509678 T2	19980922	JP19960517026T	19951117
US5482158 A	19960109	US19940347091	19941123
WO9615955 A1	19960530	WO1995US15094	19951117
ZA9509982 A	19960530	ZA19950009982	19951123

Probable Assignee: COCA COLA CO

Assignee(s):(std)**:** COCA COLA CO

Assignee(s): THE COCA COLA CO ATLANTA ; THE COCA COLA COMPANY

Inventor(s):(std)**:** PIESTER GEORGE ; PLESTER GEORGE

Inventor(s): GEORGE PIESTER ; GEORGE PLESTER

Agent(s): PHILLIPS ORMONDE FITZPATRICK

Designated states: AT AU BE CH DE DK ES FR GB GR IE IT JP LI LU MC NL PT SE

International class (IPC 8–9): B65D25/10 B65D77/08 B65D77/24 B65D8/00 (Advanced/Invention); B65D25/10 B65D8/00 (Advanced/Non–invention); B65D25/10 B65D77/00 B65D77/24 B65D8/00 (Core/Invention)

International class (IPC 1–7): B65D B65D25/10 B65D77/08 B65D77/24 B65D8/00 B65D85/72

CPC: Y10S206/831 B65D77/24 B65D2517/0052

European class: B65D77/24 L65D517/00Y6B

US class: 206/217 206/232 206/459.5 206/831 426/112

Classification Explorer

Cited documents: WO8901750 A1, US5172827 A, US5071019 A, US5056681 A, US5056659 A, US5046631 A, US4930652 A, US4923084 A, US4923083 A, US4911320 A, US4892187 A, US4826034 A, US4728001 A, US4709829 A, US4690294 A, US4537324 A, US4356927 A, US4305521 A, US4228913 A, US4109817 A, US3656654 A, GB2237789 A1, GB2217677 A1, EP0482776 A1, EP0444385 A1, EP0079673 A2, EP0078789 A2, AU7572291 A1, AU7483491 A1, AU1657695 A1,

Forward Citations: WO9965792, WO9926845, WO9901359, WO9809877, WO04101377, WO04009468, WO0204305, US6315148, US6311860, US6244022, US6123189, US6056116, US5971195, US5957279, US5899351, US5848721, US5785171, US5728415, US2010184316, US2010045231, US2006150450, US2003094459, EP1384683, EP1114782, EP1087896, AU743336, AU721512, AU2004238398,

Abstract:
Source: US5482158A A container assembly for housing liquid products and a prize therein which may be distributed with non–prize bearing containers comprising: a can for containing the liquid product in an interior chamber thereof, and a prize–holding subassembly positioned within the interior chamber for retaining a prize therein. The prize holding subassembly includes an expandable base portion which expands outwardly against interior side walls of the can to firmly grip the same in response to placing a closure on an open end of the can.

The prize within the subassembly is moveable between a storage position within the can and a second position in juxtaposed, exposed relationship with the open end of the can in response to opening of the closure means.

0) US3908857A – TAPE SEAL FOR CONTAINER

54) Family number: 19177550 (US3908857A) © PatBase

Title: Tape seal for container

Priority: AU19750080265 19750417 US19740507036 19740918 US19740514039 19741011 US19740514703 19741015 US19750622302 19751014

Family:

Publication number	Publication date	Application number	Application date
AR210865 A1	19770930	AR19750260330	19750910
AU197580158 A1	19761002	AU19750080158	19750415
AU197580265 A1	19761104	AU19750080265	19750417
BE833482 A2	19760317	BE19751006889	19750917
BE834331 A2	19760409	BE19751006941	19751009
BR7504683 A	19760803	BR19750004683D	19750722
CA1036107 A1	19780808	CA19750219842	19750211
CA1038799 A1	19780919	CA19750222362	19750318
CH591375 A	19770915	CH19750012032	19750917
DE2519709 A1	19760408	DE19752519709	19750502
DE2519709 B2	19790712	DE19752519709	19750502
DK146921 B	19840213	DK19750004164	19750917
DK146921 C	19840716	DK19750004164	19750917
DK416475 A	19760319	DK19750004164	19750917
ES212009 U	19760601	ES19750212009U	19750429
ES212009 Y	19761101	ES19750212009U	19750429
ES213833 U	19760701	ES19750213833U	19750707
ES213833 Y	19770116	ES19750213833U	19750707
ES439207 A1	19770216	ES19750439207	19750707
FI59766 B	19810630	FI19750000268	19750131
FI59766 C	19811012	FI19750000268	19750131
FI750268 A	19760319	FI19750000268	19750131
FI750552 A	19760412	FI19750000552	19750226
FI750553 A	19760416	FI19750000553	19750226
FR2287391 A1	19760507	FR19750020378	19750627
FR2288036 A1	19760514	FR19750021244	19750707
FR2291098 A1	19760611	FR19760005814	19760302
FR2291098 B1	19811231	FR19760005814	19760302
FR2299229 A1	19760827	FR19750019691	19750624
FR2299229 B1	19810821	FR19750019691	19750624
GB1501162 A	19780215	GB19750037155	19750909
GB1532975 A	19781122	GB19750041782	19751013
HK18780 A	19800418	HK19800000187	19800410
HK25880 A	19800523	HK19800000258	19800515
IN144036 A	19780311	IN1975CA01969	19751010
IT1044057 A	19800320	IT19750027317	19750917
JP1102658 C3	19820625	JP19750065191	19750530
JP51037785 A2	19760330	JP19750065191	19750530
JP56043940 B4	19811016	JP19750065191	19750530
NL177196 B	19850318	NL19750010955	19750917
NL177196 C	19850816	NL19750010955	19750917

NL7510955 A	19760322	NL19750010955	19750917	
NL7511826 A	19760413	NL19750011826	19751008	
NO752842 A	19760319	NO19750002842	19750815	
SE423079 B	19820413	SE19750009360	19750822	
SE423079 C	19820722	SE19750009360	19750822	
SE7509360 A	19760319	SE19750009360	19750822	
SE7509360 L	19760319	SE19750009360	19750822	
US3908857 A	19750930	US19740514703	19741015	
US3990615 A	19761109	US19740507036	19740918	
US4029033 A	19770614	US19750622302	19751014	
ZA7500899 A	19760929	ZA19750000899	19750212	
ZA7500900 A	19760929	ZA19750000900	19750212	
ZA7501453 A	19761027	ZA19750001453	19750310	

Probable Assignee: CONTINENTAL GROUP

Assignee(s):(std)**:** CONTINENTAL CAN CO ; CONTINENTAL CAN CO INC ; CONTINENTAL CAN CO YNC ; CONTINENTAL GROUP ; CONTINENTAL CAN COMPANY INC TE NEW YORK ; CONTINENTAL CAN COMPANY INC TE NEW YORK NEW YORK V ; CONTINENTAL CAN INC ; CONTINENTAL CAN COMPANY INC ; CONTINENTAL CAN COMPANY YNC

Assignee(s): CONTINENTAL CAN COMPANY INC TE NEW YORK NEW YORK VER ST V AM ; THE CONTINENTAL GROUP INC ; THE CONTINENTAL GROUP INC NEW YORK N Y V ST A ; KERWIN JOSEPH E ; ERLANDSON PAUL M ; CONTINENTAL CAN CY INC ; CONTINENTAL GROUP INC NEW YORK N Y V ST A ; CONTINENTAL GROUP INC ; CHIAPPE WAYNE T

Inventor(s):(std)**:** CHIAPPE W ; CHIAPPE W T ; CHIAPPE WAYNE T ; ERLANDSON P ; ERLANDSON P M ; ERLANDSON P M K ; ERLANDSON PAUL M ; CHIAPPE WAYNE THOMAS ; ERLANDSON PAUL MCKILLOP ; F C NEWMAN ; J E KERWIN ; JOSEFU EDOWAADO KAAUIN ; KERWIN J ; KERWIN J E ; KERWIN JOSEPH E ; HOORU MATSUKUKIROTSUPU AARANDO ; KERWIN JOSEPH EDWARD ; NEWMAN F ; NEWMAN F C ; NEWMAN FC ; NEWMAN FRED C ; P M ERLANDSON ; W T CHIAPPE

Inventor(s): C NEWMAN FRED ; PAUL MCKILLOP ERLANDSON ; T CHIAPPE WAYNE ; NEWMAN FRED C LA GRANGE PARK ; M ERLANDSON PAUL ; HOORU MATSUKUKIROTSUPU AARANDOSON ; KERWIN JOSEPH E WESTERN SPRINGS ; JOSEPH E KERWIN AND PAUL M ERLANDSON ; JOSEPH EDWARD KERWIN ; FRED C NEWMAN ; E KERWIN JOSEPH ; ERLANDSON PAUL M PALOS PARK ; CHIAPPE WAYNE T HINSDALE

International class (IPC 8–9): B21D51/44 B65D17/50 B65D47/10 B65D53/08 B65D77/30 (Advanced/Invention); B21D51/38 B65D17/00 B65D47/06 B65D77/22 (Core/Invention)

International class (IPC 1–7): B21D51/38 B21D51/44 B29C B65D11/06 B65D17/02 B65D17/06 B65D17/16 B65D17/20 B65D17/24 B65D17/46 B65D17/50 B65D19/30 B65D25/38 B65D39/00 B65D41/00 B65D43/00 B65D47/00 B65D47/04 B65D47/06 B65D47/10 B65D47/36 B65D51/00 B65D51/14 B65D51/14 B65D51/20 B65D53/08 B65D77/30 B65D83/06 B65D85/72 B67B7/00 C09J5/00

CPC: B65D2517/5008 B65D2517/5029 B65D2517/5078 B65D17/502 B65D2231/02 B65D2231/022 B65D2517/0013 B65D2517/0049 B65D2517/0062 B65D2517/0094 B65D2517/5005 B65D2517/5032 B65D2517/5059 B65D2517/5083 Y10T29/49885

European class: B65D17/50A1 L65D231/02 L65D231/02A L65D517/00Y2B L65D517/00Y6A L65D517/00Y7A1A L65D517/00Y8B L65D517/50M1 L65D517/50M10A1 L65D517/50M10B L65D517/50M2 L65D517/50P3 L65D517/50Q1A L65D517/50Q5

US class: 113/121C 156/69 220/260 220/269 220/359 220/359.2 220/359.3 222/485 222/541 222/541.1 222/541.9 222/563 29/458

Classification Explorer

Cited documents: US3927793 A, US3889844 A, US3883034 A, US3807595 A, US3804287 A, US3711011 A, US3666138 A, US3547305 A, US3292828 A, US3281024 A, US3251509 A, US3187932 A, US2870935 A, US2738916 A,

Forward Citations: WO9641743, WO9320854, WO9315773, WO7901094, WO13068594, USD582274, USD582273, USD533452, USD532691, USD532298, USD530610, USD513452, USD509426, USD456292, USD444385, USD439534, US9656032, US9649455, US9265901, US9242057, US9168343, US9032953, US8973784, US8944285,

US8869735, US8662075, US8596265, US8578934, US8505773, US8490818, US8327847, US8240935, US8181591, US8157128, US8141550, US8082873, US8079362, US8074643, US8074594, US8057118, US7984826, US7886934, US7757688, US7743945, US7650883, US7621273, US7597102, US7584712, US7575130, US7568481, US7543582, US7516738, US7341057, US7111749, US7100530, US7004164, US6997349, US6988642, US6953039, US6938796, US6926002, US6886707, US6786447, US6761161, US6745760, US6729330, US6561384, US6544613, US6435372, US6412637, US6382785, US6336453, US6328037, US6321927, US6305546, US6164769, US6161724, US6142339, US6082358, US5887742, US5688544, US5304265, US5299701, US5271892, US5261548, US5199613, US5110041, US5013516, US4853735, US4762246, US4723391, US4582216, US4577777, US4564121, US4562936, US4557398, US4537326, US4529468, US4526291, US4520923, US4500011, US4494681, US4478667, US4473168, US4462507, US4332846, US4324343, US4253587, US4228633, US4176760, US4167234, US4165004, US4164303, US4155481, US4141468, US4135637, US4131211, US4091957, US3990603, US3985261, US2011226771, US2011220649, US2008197153, US2007177929, US2007007310, US2004140240, US2004118847, US2004079765, US2004000573, US2003213803, JP57163643, JP57028749, JP54028642, GB2306937, GB2304673, GB2168312, GB2168312, GB2063205, FR2470086, FR2432445, FR2401068, FR2398670, EP0223094, EP0185516, EP0113698, EP0105026, EP0030649, EP0003603, DE9316645, DE9305280, DE3927466, DE3714949, DE3233106, DE3118639, DE3101084, DE3043933, DE2950214, DE2926110, DE2826612, DE2624454, DE19506953, DE19506953,

Abstract:
Source: US3908857A A tape seal end closure for closing pour openings in the end panel of a container. The tape is of rectangular configuration applied to a round end panel and to cover all of the openings extends to an area proximate the circular peripheral seaming chuck guide groove in the end panel. The tape is provided with a ring pull which is folded over the tape and forms corners with the body portion of the tape at its lateral edges. These corners, when the body portion is positioned to adequately cover all of the pour openings in the end panel project over and encroach upon the chuck guide groove since the proximate edge of the body portion of the tape extends chordally with respect to the groove. Cutting off these corners develops notches which concentrate failure – promoting stresses causing the tape to tear and thus frustrating opening of the container. The invention solves the problem by providing novel dart folds in these corners which clear the groove and which unfold when the ring pull is lifted thereby developing the full strength of the tape.

0) US5647499A – BEVERAGE CAN ASSEMBLY WITH STRAW RETENTION MEAN...

55) Family number: 13143951 (US5647499A) © PatBase

Title: BEVERAGE CAN ASSEMBLY WITH STRAW RETENTION MEANS

Priority: US19960618169 19960319

Family:

Publication number	Publication date	Application number	Application date
US5647499 A	19970715	US19960618169	19960319

Probable Assignee: PIAZZA JOHN

Assignee(s):(std)**:** PIAZZA JOHN

Inventor(s):(std)**:** PIAZZA JOHN

International class (IPC 8–9)**:** B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7)**:** B65D17/34

CPC: B65D17/165 B65D2231/02 B65D2517/0007 B65D2517/0014 B65D2517/0056 B65D2517/0082 B65D2517/0083 Y10S220/906

European class: B65D17/16B2 L65D231/02 L65D517/00Y1C L65D517/00Y2C L65D517/00Y6Z L65D517/00Y7D1 L65D517/00Y7D2

US class: 220/269 220/705 220/906 D9/518 D9/717

Classification Explorer

Cited documents: US5494184 A, US5375729 A, US5285919 A, US5031264 A, US4948009 A, US4717039 A, US3295715 A, US3263855 A,

Forward Citations: WO17065425, WO07019592, USD754386, USD655121, USD638244, USD603206, USD521871, USD519843, USD511686, USD462010, USD457613, USD455278, USD443053, USD440288, USD434840, USD430343, USD428524, US9181007, US9078535, US9038845, US8939312, US7395676, US6443324, US5743445, US2009095752, US2009026201, US2006032259, US2004094550, US2003213803, US2003168455, KR101638292, KR101036709,

Abstract:
Source: US5647499A A beverage can assembly adapted for use in association with a straw, the apparatus comprises a beverage can having an upper lid, a bend down panel being formed within the upper lid; and a pull tab being pivotally coupled to the upper lid, the pull tab including a straw retainer, in an operative orientation a user lifting the pull tab thereby forcing the bend down panel downward to define an opening in the upper lid, a user then pivoting the pull tab 180 degrees whereby the pull tab covers the opening, a user then positioning a straw through the straw retainer to secure the straw in a fixed orientation.

0) US2014263334A – END CLOSURE WITH A RING PULL ACTUATED SECONDARY...

56) Family number: 57415630 (US2014263334A) © PatBase

Title: END CLOSURE WITH A RING PULL ACTUATED SECONDARY VENT

Priority: US20130794762P 20130315 US20140198174 20140305 WO2014US20821 20140305

Family:

Publication number	Publication date	Application number	Application date
CN105102332 A	20151125	CN201480015945	20140305
CN105102332 B	20161228	CN201480015945	20140305
US2014263334 AA	20140918	US20140198174	20140305
WO14149768 A1	20140925	WO2014US20821	20140305

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP

Inventor(s):(std)**:** SCOTT ANTHONY J

Agent(s): KUGLER BRUCE A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/26 B65B43/39 B65B51/16 B65D17/00 B65D51/16 (Advanced/Invention)

CPC: B65D17/165 B21D51/383 B65D2517/0013 B65D2517/0092

US class: 220/269 220/271 413/14 413/16 413/17

Classification Explorer

Cited documents: WO11053776 A1, US6062414 A, US5494184 A, US5190149 A, US5145086 A, US5131555 A, US4576305 A, US4417668 A, US4397403 A, US4387827 A, US3877606 A, US3442416 A, US3441169 A, US3370169 A, US2012175371 AA, US2012031056 AA, US2010282706 AA, US2010258562 AA, US2008302793 AA, US2007108208 AA, JP2007529374, EP0542517, CN1681711, CN1125679,

Forward Citations: USD762114, USD750488, USD749415, US9233784, US2013118133,

Abstract:
Source: US2014263334A The present invention relates to a container end closure that generally comprises a pour opening and a secondary vent opening which improves venting during emptying of contents from the container. In particular, the present invention relates to an end closure for a container having scores defining a secondary vent opening which may optionally be opened. The secondary vent opening has a significantly larger area then vents of prior art designs and thereby improves pour rate and smoothness of pour. After the pour opening is opened using a pull tab interconnected to the end closure, a consumer may selectively open the secondary vent opening by pulling back on the tab.

0) GB1533959A – METHOD OF MAKING CONTAINER END CLOSURES

57) Family number: 4865079 (GB1533959A) © PatBase

Title: METHOD OF MAKING CONTAINER END CLOSURES

Priority: GB19770010783 19770315

Family:

Publication number	Publication date	Application number	Application date
GB1533959 A	19781129	GB19770010783	19770315

Probable Assignee: AMERICAN CAN CO

Assignee(s):(std)**:** AMERICAN CAN CO

International class (IPC 8–9): B21D51/38 B21D51/44 (Advanced/Invention); B21D51/38 (Core/Invention)

International class (IPC 1–7): B21D51/44

CPC: B21D51/383 B65D17/161 B65D2205/00

European class: B21D51/38B B65D17/16B L65D205/00

Classification Explorer

Forward Citations: WO10130820, US9199763, US9016034, JP2012526713,

Abstract:
Source: GB1533959A 1533959 Making easy open can end closures AMERICAN CAN CO 15 March 1977 10783/77 Heading B3A A can end closure having an inwardly opening easy–open tab is made from a blank having a plane central panel by forming a bulge, cutting almost completely round the bulge to define a tab, an opening in the panel, and a hinge connecting the tab to the panel, displacing the tab rim below the opening, and reforming the tab to cause it to underlie the panel while holding the tab against displacement relative to the panel in the plane of the panel, whereby to produce a uniform underlap. Fig. 6 shows the bulge/tab BB after two stages of forming and after cutting by dies 84, 81 to leave hinge 24. Reforming dies 84, 88, Fig. 8, then flatten the bulge, and coin the tab at 90, meanwhile holding the tab, to produce uniform underlap at 36, 42. In the embodiment of Fig. 11, shown after cutting, the bulge is reformed by ironing out of a shoulder 165, preferably also with some coining.

0) US4311249A – CONTAINER WITH RELEASABLE CLOSURE

58) Family number: 1358322 (US4311249A) © PatBase

Title: Container with releasable closure

Priority: CA19790332799 19790730 EP19790301530 19790731 GB19780032266 19780804

Family:

Publication number	Publication date	Application number	Application date
AT1229 E	19820715	AT19790301530T	19790731
AU197949454 A1	19800207	AU19790049454	19790801
CA1132469 A1	19820928	CA19790332799	19790730
DE2963159 D1	19820812	DE19792963159	19790731
DK324879 A	19800205	DK19790003248	19790801
EP0008191 A1	19800220	EP19790301530	19790731
EP0008191 B1	19820623	EP19790301530	19790731
JP55064045 A2	19800514	JP19790099360	19790803
NZ191166 A	19830617	NZ19790191166	19790730
US4311249 A	19820119	US19790062780	19790801
ZA7903899 A	19800730	ZA19790003899	19790730

Probable Assignee: JOYCE MF

Assignee(s):(std)**:** JOYCE M ; JOYCE M F ; JOYCE MICHAEL F ; JOYCE MICHAEL FRED

Assignee(s): JOYCE MF

Inventor(s):(std)**:** JOYCE M ; JOYCE M F ; JOYCE MICHAEL F ; JOYCE MICHAEL FRED ; MAIKERU FURETSUDO JIYOISU

Inventor(s): MICHAEL FRED JOYCE

Designated states: AT BE CH DE FR GB IT LU NL SE

International class (IPC 8–9): B21D51/38 B65D17/28 B65D17/32 B65D53/02 (Advanced/Invention); B21D51/38 B65D17/28 B65D53/00 (Core/Invention); B21D B65D B67B (Subclass/Invention)

International class (IPC 1–7): B21D51/38 B65D17/16 B65D17/28 B65D17/32 B65D53/02 B67B

CPC: B65D17/161 B65D2205/00

European class: B65D17/16B L65D205/00

US class: 220/268

Classification Explorer

Cited documents: US4134517 A, US4128186 A, US4105134 A, US4054228 A, US3935961 A, US3931909 A, US3759206 A, US3355058 A, US3262611 A, US2261117 A, JP47008695 A2,

Forward Citations: US5535911, US4802603, US4359170, JP62125748, FR2602485, EP0256920, DE9302937,

Abstract:
Source: US4311249A A container comprising a sheet metal wall portion (a) having a closure formed therein, the closure comprising a slit (s) in said wall portion (a) the margins of which by cold working have been caused to overlap to provide overlapping surfaces (b), (g) which cooperate to close the container, the wall portion (a) being deformable by manual pressure on a part (c) thereof remote from the closure to move said overlapping surfaces (b), (g) apart to define an opening (q) therebetween.

0) US2012168442A – RE–CLOSABLE HYGIENIC ECOLOGY BEVERAGE CONTAINER...

59) Family number: 51417026 (US2012168442A) © PatBase

Title: RE–CLOSABLE HYGIENIC ECOLOGY BEVERAGE CONTAINER END CLOSURE WITH RECIPIENT CONCAVE MEMBER WITH A CELLOPHANE ET AL WRAPPER HERMETICAL PROCESS

Priority: US20110930242 20110103

Family:

Publication number	Publication date	Application number	Application date
US2012168442 AA	20120705	US20110930242	20110103

Probable Assignee: BRADLEY PAMELA D

Assignee(s):(std)**:** BRADLEY PAMELA D

Inventor(s):(std)**:** BRADLEY PAMELA D

International class (IPC 8–9)**:** B65D17/32 B65D43/24 B65D53/00 (Advanced/Invention)

CPC: B65D17/16 B65D2517/0098

European class: B65D17/16 L65D517/00Y9

US class: 220/269 220/831 220/831S 220/849 220/849S

Classification Explorer

Cited documents: US7017769 BA, US5647497 A, US5139163 A, US4815628 A, US4708257 A, US3690509 A,

Forward Citations: US8833587,

Abstract:
Source: US2012168442A A process for the development and improvement of an ecological, hygienic and re–closeable beverage container end closure wherein the non–ingestible and non–inhalable hermetical wrapper and the tab are designed to remain on the beverage container end closure. The new process shall be uniquely coined as “hygienecological”. The process incorporates a cellophane, hermetical wrapper that adheres to the beverage container end closure. The beverage container is partially covered with the wrapper or “crown”. In the cross–sectional view, the crown covers the upper and the immediate anterior surface area of the beverage container. The opener tab member of the circular lid is covered by the configuration of the cellophane hermetical wrapper. Within the inner wall of the unopened beverage container, the convex ledge of the circular lid rests inside the corresponding and underlying concave recipient member. When the tab member is pulled upward the wrapper is broken and the convex ledge of the circular lid releases from the underlying concave recipient member. At the rear of the tabbed lid component, there is a flexible hinge which inherently connects the tabbed lid structured with the convex ledge to the underlying concave recipient member. In the countersink of the beverage container end closure there is a malleable cradle with a recess which is constructed to receive the upper surface of tab member. A gentle finger motion onto the underside of the tabbed lid, secures the tab member of the circular lid into the cradle recess and the circular lid directionally reclines at 180 degrees.

0) US2014237952A – METHOD AND APPARATUS FOR OPENING OF CONTAINERS ...

60) Family number: 57264823 (US2014237952A) © PatBase

Title: METHOD AND APPARATUS FOR OPENING OF CONTAINERS

Priority: US20130780124 20130228

Family:

Publication number	Publication date	Application number	Application date
US2014237952 AA	20140828	US20130780124	20130228

Probable Assignee: FESLER LANCE

Assignee(s):(std)**:** FESLER LANCE

Inventor(s):(std)**:** FESLER LANCE

International class (IPC 8–9)**:** B67B7/12 (Advanced/Invention)

CPC: B67B7/24 B67B7/403 B67B7/16

US class: 53/492 81/3.47

Classification Explorer

Cited documents: USD171415 S1, US8695457 BB, US5212869 A, US4932130 A, US2761210 A, US2014069065 AA, US2012285297 AA, US2008222815 AA, US2005076742 AA, US2004056033 AA, US1812386 A, US1295353 A,

Forward Citations: USD754921, USD753877, US9272891, US9260282, US2016207749, US2015101200, US2014069065,

Abstract:
Source: US2014237952A A method and opener for creating openings in the sidewalls of bead seam containers, such as a pop–top can, to allow air to enter the container when the contents are poured is formed to include a mounting body (140). A seam engagement element (150) sized and shaped to fit the bead seam of a container and a piercing element (152) sufficient to pierce the sidewall of the container are positioned a predetermined distance from each other and in physical association with the mounting body (140) to pierce above the fill level of the container. The bead seam of a container may be inserted into the engagement element (150) creating a fulcrum, then rotated to engage the piercing element (152) to form an opening for air to enter the container when it is poured. These means may be mounted for stationary use (134) or have a handle attached (102) for portability. The portable opener with handle (102) extends a lever body from the mounting body (150) and is operated by placing the engagement element (150) on the bead seam of the container and rotating the handle (106) about the created fulcrum to engage the piercing element (152). These means have been integrated with examples of known bottle openers and tab lifters (20) creating an opener that is capable of lifting pop–top can tabs, opening bottles, and creating openings in the sidewalls of pop–top cans.

0) US2014325943A – BEVERAGE CONTAINER WITH MOUTH OPENING AND VENT ...

61) Family number: 57710197 (US2014325943A) © PatBase

Title: BEVERAGE CONTAINER WITH MOUTH OPENING AND VENT

Priority: US20130874767 20130501

Family:

Publication number	Publication date	Application number	Application date
US2014325943 AA	20141106	US20130874767	20130501

Probable Assignee: FESLER LANCE

Assignee(s):(std)**:** FESLER LANCE

Inventor(s):(std)**:** FESLER LANCE

International class (IPC 8–9)**:** B65D17/00 (Advanced/Invention)

CPC: B65D17/161 B65D17/165 B65D2517/0014 B65D2517/0094

US class: 220/271 53/492

Classification Explorer

Forward Citations: USD762114, US9446879,

Abstract:
Source: US2014325943A A container lid (10) includes a conventional main or pour opening, a vent opening separate from the main opening, and a mechanically attached tab (50) to create the openings. A vent score (40) defines the shape of the vent opening, and a vent panel (38) covers the vent opening. A mouth score (26) defines the shape of the pour opening, and a mouth panel (28) covers the pour opening. The action of creating the main opening using the tab (50) causes a moustache score (46) to break and create a vent opening in the same action. When the tab is returned to its original orientation the vent opening may be further enlarged by engaging a raised section on the vent panel (42) and the tab (50), by engaging a vent depressing means (44) on the tab (50) to the vent panel (38), or a combination of the two.

0) US5351853A – BEVERAGE CAN CLOSURE

62) Family number: 11689517 (US5351853A) © PatBase

Title: Beverage can closure

Priority: US19930123242 19930920

Family:

Publication number	Publication date	Application number	Application date
US5351853 A	19941004	US19930123242	19930920

Probable Assignee: SHOCK JOHN P

Assignee(s):(std)**:** SHOCK JOHN P

Inventor(s):(std)**:** SHOCK JOHN P

International class (IPC 8–9)**:** B65D51/00 (Advanced/Invention); B65D51/00 (Core/Invention)

International class (IPC 1–7)**:** A47G19/22

CPC: B65D51/007

European class: B65D51/00F

US class: 220/258 220/258.2 220/259 220/729 D9/439

Classification Explorer

Cited documents: US5285924 A, US5199591 A, US4842159 A, US3428212 A,

Forward Citations: WO08037821, WO05090174, US8931656, US8833585, US8336726, US8336725, US8240498, US8215513, US7918359, US7735673, US7516866, US7152753, US7025224, US6722518, US6460719, US6290084, US6098830, US6032816, US5813559, US5785199, US2012055925, US2011233227, US2010294768, US2009179033, US2009173737, US2009026201, US2009001092, US2008110887, US2007262079, US2007131690, US2007068943, US2007062951, US2007023441, US2006027588, US2005236411, US2004065662, GB2342917,

Abstract:
Source: US5351853A A resilient, modular closure for selectively sealing an opening in a pry tab beverage can. The closure comprises a handle perpendicularly extending from an integral body. The handle is grasped between the thumb and the forefinger of the user. The body comprises a downwardly–projecting, beveled offset adapted to mate with the can opening, and a notch adapted to wedgably engage the pry tab. The ventral surface of the body comprises a circumferential ridge adapted to contact a top of a beverage can to seal around the opening or to mate with a reinforcement channel surrounding the can opening. Raised guides are defined along the dorsal surface of the notch for captivating the pry tab during installation of the closure. A snap fit yieldably engages the rim of the can when the closure is installed. The snap fit comprises a rim–receptive slot. A stop extends rearwardly from the body to contact an inner surface of the rim, and an "L" shaped jaw extends downwardly from the handle. A horizontal leg of the jaw catches on the lower outer surface of the rim when the closure is forced downwardly and the can rim enters the slot between the horizontal leg and the stop.

0) US2015136776A – CONTAINER END CLOSURE WITH A SCORE FEATURE

63) Family number: 59283670 (US2015136776A) © PatBase

Title: CONTAINER END CLOSURE WITH A SCORE FEATURE

Priority: US20130906796P 20131120 US20140549078 20141120 WO2014US66651 20141120

Family:

Publication number	Publication date	Application number	Application date
AU2014352940 AA	20150528	AU20140352940	20141120
CA2929949 AA	20160506	CA20142929949	20141120
CN105745156 A	20160706	CN201480062967	20141120
EP3071491 A1	20160928	EP20140864608	20141120
EP3071491 A4	20170329	EP20140864608	20141120
MX2016005873 A1	20160713	MX20160005873	20141120
US2015136776 AA	20150521	US20140549078	20141120
WO15077469 A1	20150528	WO2014US66651	20141120

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP

Assignee(s): CHASTEEN HOWARD C ; JACOBER MARK A ; SCOTT ANTHONY J

Inventor(s):(std)**:** CHASTEEN HOWARD C ; JACOBER MARK A ; SCOTT ANTHONY J

Inventor(s): ANTHONY J SCOTT ; MARK A JACOBER ; HOWARD C CHASTEEN

Agent(s): MADDERNS PATENT AND TRADE MARK ATTORNEYS; SMART AND BIGGAR; EISENFUEHR SPEISER; PEARSON KENDRIA E

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/38 B65D17/00 B65D17/28 B65D17/34 B65D51/16 (Advanced/Invention)

CPC: B65D17/165 B21D51/383 B65D2517/0089 B65D2517/0094

US class: 220/269 413/16 413/17

Classification Explorer

Cited documents: US6024239 A, US5219257 A, US2013118133 AA, US2012205378 AA, US2004065663 AA, EP1072336 A2, CN103140423 A,

Forward Citations: USD762114, USD750488, USD749415, US9446879, US9233784, US2013118133,

Abstract:
Source: US2015136776A An end closure for food and beverage containers is provided. The end closure comprises a score fracture force reduction feature. Thus, less force is required by a user to fracture the score and open the opening in the end closure. In one embodiment, the score fracture force reduction feature is a collapsible form raised above the center panel and having a score line and a coined area.

0) US4233331A – METHOD OF SECURING OPENER KEY TO A CONTAINER US...

64) Family number: 1358069 (US4233331A) © PatBase

Title: METHOD OF SECURING OPENER KEY TO A CONTAINER USING ORIENTED POLYPROPYLENE FILM WITH SOLVENTLESS ACRYLIC ADHESIVE

Priority: US19780929489 19780731 US19800113205 19800118

Family:

Publication number	Publication date	Application number	Application date
AU197948736 A1	19800207	AU19790048736	19790706
AU528363 B2	19830428	AU19790048736	19790706
FR2432442 A1	19800229	FR19790019471	19790727
FR2432442 B1	19831125	FR19790019471	19790727
GB2026430 A1	19800206	GB19790020948	19790615
GB2026430 B2	19820616	GB19790020948	19790615
IT7949903 A0	19790731	IT19790049903	19790731
JP1481393 C3	19890210	JP19790094842	19790724
JP55022495 A2	19800218	JP19790094842	19790724
JP63030219 B4	19880616	JP19790094842	19790724
US4233331 A	19801111	US19780929489	19780731
US4309237 A	19820105	US19800113205	19800118

Probable Assignee: AMERICAN NATIONAL CAN CO

Assignee(s):(std): AMERICAN CAN CO

Assignee(s): AMERICAN CAN COMPANY ; AMERICAN CAN CY ; AMERICAN CAN PACKAGING INC ; AMERICAN NATIONAL CAN CO

Inventor(s):(std): LEMKE HAROLD C ; ROHOWETZ STANLEY E ; ROHOWETZ STANLEY EDW ; SUTANREE II ROOUETSUTSU ; HARORUDO SHII REMUKE

Inventor(s): STANLEY EDW ROHOWETZ ; HAROLD C LEMKE ; SUTANREE II ROOETSUTSU

Agent(s): PHILLIPS ORMONDE AND FITZPATRICK

International class (IPC 8–9): B21D51/38 B21D51/44 B65B61/18 B65D17/52 (Advanced/Invention); B65B61/18 (Advanced/Non–invention); B21D51/38 B65B61/18 B65D17/00 (Core/Invention)

International class (IPC 1–7): B21D51/00 B21D51/44 B29C27/20 B32B31/00 B65B55/02 B65B61/18 B65C9/08 B65D17/52

CPC: Y10S428/91 Y10T156/1339 Y10T428/24008 B21D51/383 Y10T156/1773

European class: B21D51/38B

US class: 156/332 156/521 156/568 156/85 156/87 426/131 426/407 428/910 428/99 53/133.3 53/156 53/412 53/425

Classification Explorer

Cited documents: US4181555 A, US3874034 A, US3716433 A, US3565738 A, US3110554 A, US305680 A, US2996177 A, US2921045 A, US2859200 A, US2847340 A, US2532166 A, US2456467 A, US2107311 A, US2027624 A,

Forward Citations: WO9217306, US8353147, US6971219, US6915829, US6808822, US6526725, US6282865, US6127024, US6098369, US5688346, US5190609, US4758300, US4722166, US4647333, US4605459, US4602977, US4584819, US4384915, US4372797, US4351679, US4331434, US4318765, US4317694, US2015111714, US2010061666, US2004167003, US2004123955, US2004007318, US2003134062, US2002098303, JP63300958, JP57055838, EP0271665, AU586922,

Abstract:
Source: US4233331A The present invention pertains to a machine and method of adhering a can opening key to a container and the article formed by such method and machine. More specifically, this invention pertains to the taping of a can opening key to a can body wall by means of a continuous motion high speed machine for applying a polymeric film carrying an adhesive on a surface thereof.

0) WO11095318A1 – CONTAINER LID, AND METHOD FOR PRODUCING A CONTA...

65) Family number: 49388867 (WO11095318A1) © PatBase

Title: CONTAINER LID, AND METHOD FOR PRODUCING A CONTAINER LID

Priority: EP20100001042 20100202

Family:

Publication number	Publication date	Application number	Application date
DE502010001928 D1	20130228	DE201050001928T	20100202
EP2354021 A1	20110810	EP20100001042	20100202
EP2354021 B1	20121226	EP20100001042	20100202
WO11095318 A1	20110811	WO2011EP00445	20110201

Probable Assignee: THIELEN KLAUS

Assignee(s):(std)**:** THIELEN KLAUS ; THIELEN WOLFGANG

Inventor(s):(std)**:** THIELEN KLAUS ; THIELEN WOLFGANG

Agent(s): MANITZ FINSTERWALD AND PARTNER GBR

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/28 B65D17/34 (Advanced/Invention)

CPC: B65D47/103

European class: B65D47/10A

Classification Explorer

Cited documents: WO08098558 A1, US6286703 BA, US5242073 A, US2009001081 AA, US2008110887 AA, NL2000219 C2, GB1389351 A, EP1607341 A1, DE9005150 U, DE8911286 U,

DE202005017270 U1

DE19613246 A1,

Forward Citations: WO13153218,

Abstract:
The invention relates to a container lid (1) having a reclosable opening, in particular for drinks containers, having a lid surface (3) made from a first plastic material, an edge section which surrounds the latter, and an opening region (11) which is delimited by a circumferential tear–open notch (4). A lever element is provided for penetrating the tear–open notch, which lever element is connected on one side to a pulling lug (15) and on the other side acts on the opening region of the lid surface and is supported via a bearing which steps up the opening force applied to the pulling lug. The opening region is configured as a closing lid and is connected at its outer edge, adjacent to the tear–open notch, non–positively and/or positively to a collar part (5) made from a second plastic material.

0) US4129227A – ECOLOGY POP–IN CONTAINER TOP

66) Family number: 7193528 (US4129227A) © PatBase

Title: Ecology pop–in container top

Priority: US19780887875 19780317

Family:

Publication number	Publication date	Application number	Application date
US4129227 A	19781212	US19780887875	19780317

Probable Assignee: NEIL THEODORE K O

Assignee(s):(std)**:** NEIL THEODORE K O ; SPECTOR GEORGE

Assignee(s): O NEIL THEODORE K

Inventor(s):(std)**:** O NEIL THEODORE K ; SPECTOR GEORGE

International class (IPC 8–9): B65D41/32 (Advanced/Invention); B65D41/32 (Core/Invention)

International class (IPC 1–7): B65D41/32

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/267 220/277

Classification Explorer

Cited documents: US4018357, US3726432,

Forward Citations: US8469218, US2011062158, US2011031247,

Abstract:
Source: US4129227A An improved beverage can in which a hole is punched in the can top, so to allow drinking from the can, a scored tab of the hole being pushed down into the can and out–of–the–way instead of being torn off and tossed on the ground; the can in one design including a slide having attached "lock–in legs" which, when depressed, break the tab scoring, and when held–down slide is then pushed, it causes the tab to curl up inwardly into the can; and the slide in another design thereof including means to also roll the soft edges downward into the can so to prevent cutting the lips of a drinker.

0) US4637260A – CAN END TESTER

67) Family number: 5194159 (US4637260A) © PatBase

Title: Can end tester

Priority: US19850808552 19851213 US19860895589 19860814

Family:

Publication number	Publication date	Application number	Application date
US4637260 A	19870120	US19860895589	19860814

Probable Assignee: REYNOLDS METALS CO

Assignee(s):(std)**:** REYNOLDS METALS CO

Assignee(s): REYNOLDS METALS COMPANY

Inventor(s):(std)**:** GILLIAM EDWARD C ; JACKSON JOHN M ; LAMIE BILLY J

International class (IPC 8–9)**:** B07C5/34 (Advanced/Invention); B07C5/34 (Core/Invention)

International class (IPC 1–7)**:** G01N3/08

CPC: B07C5/34

European class: B07C5/34

US class: 73/826 73/834

Classification Explorer

Cited documents: US4519489 A, US4511044 A, US4497409 A, US4495797 A, US4390098 A, US4315688 A, US4110493 A, US4107541 A, US4044891 A, US4016968 A, US3941070 A, US3700101 A, US3688567 A, US3559471 A, US3415350 A, US3261465 A, US2905318 A, US2803343 A, US2749744 A, US2411991 A, US2321331 A, US1694828 A, JP47000902 A2,

Forward Citations: WO9003563, US5086653, US4850230,

Abstract:
Source: US4637260A An apparatus is disclosed for testing easy–open can ends. The apparatus orients the ends, opens the ends, tests the ends to assure that opening has occurred and separates defective ends which have not successfully opened from acceptable ends.

68) Family number: 10320515 (US5626228A) © PatBase

Title: Thin–walled can having plurality of supporting feet with two support features

Priority: US19960561295 19960501 US19960640461 19960501 WO1997US06386 19970418

Family:

Publication number	Publication date	Application number	Application date
AT261857 E	20040415	AT19970922332T	19970418
AU199728035 A1	19971119	AU19970028035	19970418
BRPI9708896 A	20000104	BR1997PI08896	19970418
CA2252653 AA	19981026	CA19972252653	19970418
CA2252653 C	20030107	CA19972252653	19970418
CN1073951 C	20011031	CN19971095756	19970418
CN1229392 A	19990922	CN19971095756	19970418
DE69728145 D1	20040422	DE19976028145	19970418
EP0907567 A1	19990414	EP19970922332	19970418
EP0907567 A4	20020904	EP19970922332	19970418
EP0907567 B1	20040317	EP19970922332	19970418
ES2217417 T3	20041101	ES19970922332T	19970418
HK1022460 A1	20020517	HK20000101450	20000308
JP2002515842 T2	20020528	JP19970538950T	19970418
US5626228 A	19970506	US19960640461	19960501
WO9741039 A1	19971106	WO1997US06386	19970418

Probable Assignee: ANHEUSER BUSCH LLC

Assignee(s):(std)**:** ANHAUSER BUSCH INC ; ANHEUSER BUSCH

Assignee(s): ANHEUSER BUSCH INC ; ANHEUSER BUSCH LLC ; HENKELMANN DAVID H ; WIEMANN DAVID J

Inventor(s):(std)**:** HENKELMANN D H ; HENKELMANN DAVID H ; HENKELMANN H ; WIEMANN D J ; WIEMANN DAVID J ; WIEMANN J

Inventor(s): D H HENKELMANN ; D J WIEMANN ; DAVID H HENKELMANN ; DAVID J WIEMANN

Agent(s): KIRBY EADES GALE BAKER

Designated states: AT AU BE BR CA CH CN CZ DE DK ES FI FR GB GR IE IT JP LI LU MC NL PT SE SK

International class (IPC 8–9)**:** B65D1/02 B65D1/16 B65D1/26 B65D21/02 B65D21/032 B65D25/20 B65D8/00 (Advanced/Invention); B65D1/02 B65D8/00 (Advanced/Non–invention); B65D1/00 B65D1/02 B65D1/22 B65D21/02 B65D8/00 (Core/Invention)

International class (IPC 1–7)**:** B02C1/02 B65D B65D1/02 B65D1/16 B65D21/02 B65D21/032 B65D25/20 B65D8/00 H04N7/52

CPC: B65D1/165 B65D21/0215 B65D1/26

European class: B65D1/16B B65D1/26 B65D21/02E5

US class: 206/511 220/606

Classification Explorer

Cited documents: USD269066 S1, USD257463 S1, USD254957 S1, US4834256 A, US4732292 A, US4685582 A, US4646930 A, US4264017 A,

Forward Citations: WO11027910, WO0153160, WO0153160, USD609564, US8993021, US7185525, US6112924, US2015158624, US2013256180, US2012156335, US2009194561, US2005028576, JP2013542896, JP2011068361, JP2011051625, JP2006327655, EP2640646, CN103979179,

Abstract:
Source: US5626228A A metal container for holding fluids is provided having a bottom wall including a externally convex dome portion and a plurality of supporting feet formed therein. The supporting feet are circumferentially spaced apart from each other and projected generally downward beyond the dome portion. Each supporting foot has formed thereon stand features and stacking features. The stand features are radially spaced from the longitudinal axis of the container and disposed at downwardmost locations on the feet to alone support the container in an upright position on a flat horizontal surface when the container is not internally pressurized. The stacking features are disposed adjacent to the stand features and define, in cross−sectional elevation view, axial stacking surfaces and radial stacking surfaces. The axial stacking surfaces are axially positioned in relation to stand features and the radial stacking surfaces are radially positioned in relation to the longitudinal axis so as to interfit with an upper seamed edge of an adjacent below container to alone provide for stacking engagement when the container is not internally pressurized. Since the bottom wall does not rely on any large−radius externally concave mechanical features to resist internal pressurization, a thinner gauge metal can be used to satisfy design parameters and can achieve cost and metal reduction savings. The profile of the bottom wall also results in very small values for profile deformation and changes in can dimensions over a wide range of internal pressures.

0) US4976367A – EASILY EMPTIED FOOD CAN

69) Family number: 4369703 (US4976367A) © PatBase

Title:	Easily emptied food can
Priority:	US19890329948 19890329 US19900474208 19900131

Family:

Publication number	Publication date	Application number	Application date
US4976367 A	19901211	US19900474208	19900131

Probable Assignee:	HOEFLER RAPHAEL A
Assignee(s):(std)**:**	HOEFLER RAPHAEL A
Inventor(s):(std)**:**	HOEFLER RAPHAEL A
International class (IPC 8–9)**:**	B65D17/50 B65D25/38 (Advanced/Invention); B65D17/00 B65D25/38 (Core/Invention)
International class (IPC 1–7)**:**	B65D17/50 B67B7/24
CPC:	B65D17/502 B65D25/38 B65D2231/02 B65D2517/0013 B65D2517/0049 B65D2517/0061 B65D2517/0089 B65D2517/0094 B65D2517/5083
European class:	B65D17/50A1 B65D25/38 L65D231/02 L65D517/00Y2B L65D517/00Y6A L65D517/00Y7A1 L65D517/00Y7Z L65D517/00Y8B L65D517/50Q5
US class:	220/260 220/270 220/359 220/359.2 220/367 220/600 220/601 220/66 222/1 222/394 426/115 426/131 426/389

Classification Explorer

Cited documents:	US4883198 A, US4706849 A, US4412644 A, US4405056 A, US4140241 A, US4135637 A, US4024980 A, US3782609 A, US3692202 A, US3680828 A, US3568875 A, US3172386 A, US1328937 A,
Forward Citations:	US5782373, US5722561, US5624295, US5146957, US5123461, US2012085787, US2012085786, US2009200305, US2008149516, US2007259083, US2005029267, FR2841817,

Abstract:
Source: US4976367A A container for food or the like comprises a cylindrical wall enclosed by a top and a bottom lid. The cylindrical wall has a slight angle, thereby being wider at the top lid than at the bottom lid. The bottom lid contains a round vent hole having its lip drawn over in the direction of the interior of the container. An air–tight vent seal tab covers the vent hole. With the top lid removed, the container is inverted so that the bottom lid is facing upward, and then the vent seal tab is removed. A common drinking straw is inserted into the vent hole and is sealed therein by the vent hole lip. Mouth pressure is applied to the drinking straw. This pressure and the force due to gravity, together, force the contents of the container to start to move downward toward the open top lid. As initial motion occurs the contents looses contact with the sidewall of the container because of the slight angle and thereby is easily removed.

0) WO12156068A1 – RE–CLOSABLE CONTAINER/BEVERAGE CAN WIEDERVERSC...

70) Family number: 52349715 (WO12156068A1) © PatBase

Title: RE–CLOSABLE CONTAINER/BEVERAGE CAN

Priority: DE201110101609 20110514

Family:

Publication number	Publication date	Application number	Application date
DE102011101609 A1	20121115	DE201110101609	20110514
WO12156068 A1	20121122	WO2012EP02059	20120514

Probable Assignee: ACKERMANN

Assignee(s):(std)**:** ACKERMANN BRUNO ; FOLLAND DIETER ; GOETZ HERMANN ; ZIELKE AXEL

Assignee(s): ZIELKE ; ACKERMANN ; GOETZ ; FOLLAND

Inventor(s):(std)**:** ACKERMANN BRUNO ; FOLLAND DIETER ; GOETZ HERMANN ; ZIELKE AXEL

Agent(s): BURKART BILL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D43/18 B65D51/00 B65D51/20 (Advanced/Invention)

CPC: B65D17/165 B65D2251/0025 B65D2251/0071 B65D2517/0014 B65D2517/0041

European class: B65D17/16B2 L65D251/00Y2J L65D251/00Y6A L65D517/00Y2C L65D517/00Y5D1

Classification Explorer

Cited documents: US6739471 BB, EP1265792 B1,

DE102005060835 A1

Forward Citations: GB2514635, DE102012213094,

Abstract:
The invention relates to a re–closable container having a container lid (2) that can be broken open and a lid rotary closure (3), which is designed to tear the discharge opening (40) open and to re–close the discharge opening (40). The container lid (2) and the lid rotary closure are supported via a coupling device (5, 6) during the breaking–open operation.

0) US3875789A – APPARATUS FOR TESTING END CLOSURES

71) Family number: 1132080 (US3875789A) © PatBase

Title: APPARATUS FOR TESTING END CLOSURES

Priority: US19740454835 19740326 US19740454837 19740326

Family:

Publication number	Publication date	Application number	Application date
DE2508004 A1	19751002	DE19752508004	19750225
DE2508047 A1	19751002	DE19752508047	19750225
GB1493121 A	19771123	GB19740039252	19750319
JP1151896 C3	19830630	JP19740136667	19741130
JP50126486 A2	19751004	JP19740136667	19741130
JP57046013 B4	19820930	JP19740136667	19741130
US3875789 A	19750408	US19740454835	19740326
US3875790 A	19750408	US19740454837	19740326

Probable Assignee: AMERICAN NATIONAL CAN CO

Assignee(s):(std)**:** AMERICAN CAN CO

Assignee(s): AMERICAN CAN COMPANY ; AMERICAN CAN PACKAGING INC ; AMERICAN NATIONAL CAN CO

Inventor(s):(std)**:** HERDZINA FRANK J ; HERDZINA FRANK JOHN ; JACOBS EDWARD C ; JACOBS EDWARD CHARLES ; NIGHTINGALE RICHARD P ; NIGHTINGALE RICHARD PAUL ; OROSY JOSEPH J ; OROSY JOSEPH JAMES

Inventor(s): P NIGHTINGALE RICHARD ; J HERDZINA FRANK ; J OROSY JOSEPH ; C JACOBS EDWARD

International class (IPC 8–9)**:** G01M3/04 G01M3/26 G01M3/28 (Advanced/Invention); G01M3/04 G01M3/26 G01M3/28 (Core/Invention)

International class (IPC 1–7)**:** B65B57/00 G01M3/04 G01M3/26 G01M3/28 G01M3/32

CPC: G01M3/2853 G01M3/2869 G01M3/26

European class: G01M3/26 G01M3/28D G01M3/28D4

US class: 73/40 73/400 73/45.2

Classification Explorer

Cited documents: US3499314 A, US2696107 A,

Forward Citations: WO9958946, US8701478, US7810377, US7673491, US6393896, US6351984, US6014891, US5668307, US4440016, US4096736, US3954003, US2013133414, US2009211206, US2009175706, US2009044601, JP58063830, JP55014548, JP3043575, GB2162327, FR2982951, FR2651207, FR2568371, EP1004508, DE4212938, DE19605920, CN105485341, CN103148994, CN102680177, CN102486429, CN102323014,

Abstract:
Source: US3875789A An improved apparatus for testing container end closures for leakage, of the type utilizing a pressurized gas media and including a test chamber comprised of a vertically reciprocable upper chambered member and a fixed lower chambered member, the improvement in the test chamber for testing an end closure placed therein and having a displaceable member sealed thereto by a distensible sealant material, which comprises: means for effecting a separation between the end closure and displaceable member to distend the sealant material and expose it to the pressurized gas to test the sealant material and the seal it provides for leakage, the means for effecting the separation including a springmounted chuck connected to the lower chambered member and having a resisting surface, and, an engaging surface on the upper chambered member for moving end closure downward, while downward movement of the displaceable member is resisted by the chuck resisting surface. 12 Claims, 9 Drawing Figures

0) US4848582A – SLIDING PACKAGE INCORPORATING AT LEAST ONE RETR...

72) Family number: 5891109 (US4848582A) © PatBase

Title: Sliding package incorporating at least one retractable panel

Priority: CA19870553479 19871203 FR19860007627 19860528 FR19870014540 19871021

Family:

Publication number	Publication date	Application number	Application date
CA1294583 A1	19920121	CA19870553479	19871203
CN1016767 B	19920527	CN19871008307	19871201
CN1032646 A	19890503	CN19871008307	19871201
EP0312669 A1	19890426	EP19870402732	19871202
FR2599333 A1	19871204	FR19860007627	19860528
FR2599333 B1	19891117	FR19860007627	19860528
FR2622173 A2	19890428	FR19870014540	19871021
FR2622173 B2	19900518	FR19870014540	19871021
JP1111675 A2	19890428	JP19870306832	19871203
US4848582 A	19890718	US19870128051	19871203

Probable Assignee: POLEVAL

Assignee(s):(std)**:** DANIERU REBUASAARU ; LEVASSEUR DANIEL ; POGGI PAUL ; POLEVAL ; POORU POJI

Assignee(s): DANIEL LEVASSEUR

Inventor(s):(std)**:** DANIERU REBUASAARU ; POORU POJI ; POGGI PAUL ; LEVASSEUR DANIEL

Inventor(s): PAUL POGGI ; DANIEL LEVASSEUR

Agent(s): ROBIC

Designated states: AT BE CH DE ES FR GB GR IT LI LU NL SE

International class (IPC 8–9)**:** A24F27/12 B65D5/38 B65D73/00 B65D77/24 B65D85/10 (Advanced/Invention); A24F27/00 B65D73/00 B65D77/24 B65D85/08 (Core/Invention)

International class (IPC 1–7)**:** A24F27/00 A24F27/12 A24F27/14 A61J1/03 B31B13/00 B65D5/38 B65D73/00 B65D83/02 B65D83/04 B65D85/10 B65D85/56

CPC: B65D77/24 B65D85/109 A24F27/12

European class: A24F27/12 B65D77/24 B65D85/10K2

US class: 206/104 206/110 206/528 206/534.2

Classification Explorer

Cited documents: US819574 A, US4535890 A, US4192422 A, US4090605 A, US3530977 A, US3452860 A, US3327843 A, US2946432 A, US2737290 A, US2212773 A, US2199476 A, US1961344 A, US1349780 A, FR1121043 A,

Forward Citations: WO0238454, USD578386, USD457246, US9452877, US8602218, US7641050, US7540383, US7090079, US6978894, US6523691, US2012037517, US2009101537, US2007163918, US2004108240, US2004050748, KR100804850, GR89100321, GR890100321, GB2417940, EP1309497, CN102574021, AU2002214485,

Abstract:
Source: US4848582A A package for articles such as matches, medication in tablet form and the like comprises a flat pocket made up of a foldable element and one or more retractable panels. Each retractable panel is able to assume a deployed position in which an article in the package is visible and accessible and an undeployed position in which the article is invisible and inaccessible. The flat pocket comprises a front flap and a rear flap, each retractable panel is attached to but movable relative to the front or rear flap and the articles in the package are distinct from each retractable panel.

0) DE2211154A1 – BLIK MET SCHUIFLIP OP HET

73) Family number: 18292155 (DE2211154A1) © PatBase

Title: BLIK MET SCHUIFLIP OP HET

Priority: BE19710772392 19710909 US19700070768 19700909 US19710150351 19710607

Family:

Publication number	Publication date	Application number	Application date
BE772392 A2	19720117	BE19710772392	19710909
BE784514 A5	19721002	BE19720784514	19720607
DE2143463 A1	19720323	DE19712143463	19710831
DE2211154 A1	19721228	DE19722211154	19720308
ES172277 U	19720201	ES19710172277U	19710909
ES172277 Y	19720901	ES19710172277U	19710909
ES178040 U	19721016	ES19720178040U	19720308
ES178040 Y	19730501	ES19720178040U	19720308
FR2106406 A3	19720505	FR19710032513	19710909
FR2106406 A5	19720505	FR19710032513	19710909
FR2106406 B3	19740510	FR19710032513	19710909
FR2140373 A1	19730119	FR19720008160	19720309
NL7112310 A	19720313	NL19710012310	19710907
NL7203063 A	19721211	NL19720003063	19720308
ZA7101411 A	19711124	ZA19710001411	19710304

Probable Assignee: CROWN CORK AND SEAL CY INC

Assignee(s):(std)**:** CROWN CORK AND SEAL CO ; CROWN CORK AND SEAL CO INC ; CROWN CORK AND SEAL CY INC ; CROWN CORK AND SEAL COMPANY INC ; CROWN CORK SEAL CO INC ; CROWN CORK SEAL COMPANY INC ; CROWN CORK SEAL CY INC

Assignee(s): CROWN CORK SEAL CY INC US ; CROWN CORK AND SEAL CY INC 9300 ASHTON ROAD PHILADELPHIA PENNSYLVANIA V S A ; CROWN CORK AND SEAL CY INC 9300 ASHTON ROAD PHIL

Inventor(s):(std)**:** LUVIANO J ; LUVIANO J J

Inventor(s): J J LUVIANO

International class(IPC 8–9)**:** B65D17/50 B65D47/28 (Advanced/Invention); B65D17/00 B65D47/04 (Core/Invention)

International class(IPC 1–7)**:** B65D17/00 B65D17/06 B65D17/16 B65D41/00 B65D41/12 B65D43/20 B65D47/00 B65D47/26 B65D47/28

CPC: B65D47/286 B65D17/506

European class: B65D17/50B B65D47/28D

Classification Explorer

Forward Citations: WO14003586, WO14003585, US9592928,

Abstract:
Source: DE2211154A1 (Claim 1) P A T E N T A N S P R 0 C H E 1. Behaeltermuendung, insbesondere nach Patent... (Patentaamel– dunr P 21.43.463.9 – cc–2o), g e k e n n z e i c h n e t durch einen MUndungsverschluss mit einem Endwandteil (16, 60), der eine oeffnung (14, 64) sowie einander gegenueber liegende Ansaetze (20, 66) aufweist, die sich gegenueber dem Endwandteil nach aussen bzw.

Machine translation: (Claim 1) P A T E N T A N S P R 0 C H E 1. Container delta, in particular after patent… (Patentaamel dunr P 21.43.463.9 – cc–2o), g e k e n n z e i C h n e t by a mouth catch with a final wall part (16, 60), the one opening (14, 64) as well as opposite lying beginnings (20, 66) exhibits itself each other, in relation to the final wall part outward and/or.

0) EP2546159B1 – WIEDERVERSCHLIESSBARER BEHAELTER RESEALABLE CO...

74) Family number: 52789553 (EP2546159B1) © PatBase

Title: WIEDERVERSCHLIESSBARER BEHAELTER RESEALABLE CONTAINER

Priority: EP20110173524 20110712

Family:

Publication number	Publication date	Application number	Application date
DE502011009495 D1	20160602	DE201150009495T	20110712
EP2546159 A1	20130116	EP20110173524	20110712
EP2546159 B1	20160420	EP20110173524	20110712

Probable Assignee: GUTMANN HEIMO

Assignee(s):(std)**:** GUTMANN HEIMO

Inventor(s):(std)**:** GUTMANN HEIMO

Agent(s): WIRNSBERGER GERNOT

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

International class (IPC 8–9): B65D17/00 (Advanced/Invention)

CPC: B65D2517/0014 B65D17/166 B65D2517/0034

Classification Explorer

Cited documents: WO06112613 A1, WO0002785 A1, US6098830 A, US5497896 A, US4749099 A, US4084721 A, US2007145055 AA, NL2000219 C2, GB2426970 A1, GB2331284 A1, EP1688355 A1, EP0078397 A2, DE29804273 U1, DE20119979 U1, DE10156821 A1,

Forward Citations: KR101616917,

Abstract:
The reclosable container comprises a lid (3) with breaking points, and a cover (1) with a tong (1d), with which the lid is pressed in an area between the breaking points by tilting or overturning to deblock an opening (3b). The cover is shifted, such that the deblocked opening (3b) is closed. A small plate with a recess is provided at the lid, where the small plate is connected with a connecting part (2), particularly a rivet and with the lid and is displaced along the recess relative to the lid.

- **search:** SS5 FT=("can end" or "can ends") and (beverage* or food*) and (orient* or guid* or positio*) (Results 577)
- **search:** SS6 FT=("can end" or "can ends") and (beverage* or food*) and (orient* or guid* or positio*) and tab (Results 194)
- List: SS6 1–50 (FT=("can end" or "can ends") and (beverage* or food*) and (orient* or guid* or positio*) and tab) (Results 194)

0) US2003034346A – CAN END

1) Family number: 28086988 (US2003034346A) © PatBase

Title: Can end

Priority: EP20020761392 20020816 EP20070012544 20020816 JP20070513329 20050512 US20040834671 20040429 US20040846259 20040514 US20010931497 20010816 US20020219914 20020815 US20030680644 20031007 US20040847172 20040517 US20050235653 20050926 US20070929072 20071030 US20090497306 20090702 US20090497301 20090702 WO2005US16546 20050512 WO2002US26089 20020816 WO2005US16546 20061213

Family:

Publication number	Publication date	Application number	Application date
AT369293 E	20070815	AT20020761392T	20020816
AT466779 E	20100515	AT20050749997T	20050512
AU2002326666 AA	20030303	AU20020326666	20020816
AU2002326666 BB	20060223	AU20020326666	20020816
AU2002326666 CA	20061130	AU20020326666	20020816
AU2005245402 AA	20051201	AU20050245402	20050512
AU2005245402 BB	20110811	AU20050245402	20050512
BRPI0211974 A	20040921	BR2002PI11974	20020816
BRPI0211974 B1	20120529	BR2002PI11974	20020816
BRPI0511128 A	20071127	BR2005PI11128	20050512
CA2566679 AA	20061114	CA20052566679	20050512
CA2566679 C	20100420	CA20052566679	20050512
CN101014503 A	20070808	CN200580023805	20050512
CN101014503 B	20110209	CN200580023805	20050512
CN1284704 C	20061115	CN20028018080	20020816
CN1555327 A	20041215	CN20028018080	20020816
DE602005021102 D1	20100617	DE200560021102T	20050512
DE60221675 D1	20070920	DE20026021675	20020816
DE60221675 T2	20080605	DE20026021675T	20020816
DE60243897 D1	20121220	DE20026043897	20020816
EG24911 A	20101219	EG20060001086	20061113
EP1425225 A1	20040609	EP20020761392	20020816
EP1425225 B1	20070808	EP20020761392	20020816
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EP1834885 A2	20070919	EP20070012544	20020816
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IN06765DN2006 A	20070831	IN2006DN06765	20061114
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JP2007537107 T2	20071220	JP20070513329T	20050512
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RU2006142349 A	20080620	RU20060142349	20050512	
RU2270794 C2	20060227	RU20040105148	20020816	
RU2424166 C2	20110720	RU20060142349	20050512	
TR200606355 T2	20070122	TR20060006355T	20050512	
US2003034346 AA	20030220	US20010931497	20010816	
US2003042258 AA	20030306	US20020219914	20020815	
US2004065663 AA	20040408	US20030680644	20031007	
US2004200838 AA	20041014	US20040834671	20040429	
US2004211780 AA	20041028	US20040847172	20040517	
US2005006388 AA	20050113	US20040846259	20040514	
US2006096994 AA	20060511	US20050235653	20050926	
US2008050207 AA	20080228	US20070929072	20071030	
US2009266824 AA	20091029	US20090497306	20090702	
US2009269169 AA	20091029	US20090497301	20090702	
US6772900 BB	20040810	US20010931497	20010816	
US7004345 BB	20060228	US20020219914	20020815	
US7174762 BB	20070213	US20030680644	20031007	
US7350392 BB	20080401	US20040847172	20040517	
US7556168 BB	20090707	US20040846259	20040514	
US7644833 BB	20100112	US20050235653	20050926	
US8052005 BB	20111108	US20090497306	20090702	
US8104319 BB	20120131	US20090497301	20090702	
US8328492 BB	20121211	US20070929072	20071030	
WO03016155 A1	20030227	WO2002US26089	20020816	
WO05113351 A1	20051201	WO2005US16546	20050512	
WO07038066 A1	20070405	WO2006US36403	20060919	

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** GOGOLA MICHAEL R ; GOPALASWAMY RAJESH ; REKSAM BEVERIDZH KEHN KOMPANI ; TURNER TIMOTHY ; REXAM BEVERAGE CAN CO ; FORREST RANDALL G ; TURNER TIMOTHY L

Assignee(s): FORREST RANDY G ; REXAM BEVERAGE CAN COMPANY

Inventor(s):(std)**:** FORREST RANDY G ; GOGOLA MICHAEL ; GOPALASWAMY RAJESH ; RAJESH FORREST RANDALL G TURNE ; RAJESH GOPALASWAMY ; TIMOTHY TURNER ; TURNER TIMOTHY ; TURNER TIMOTHY L ; TURNER TIMOTHY GOPALASWAMY RAJ ; TERNER TIMOTI ; RAJES GOPALASWAMY ; GOPALASVAMI RADZHESH ; GOGOLA MICHAEL R ; FORREST REHNDALL G ; FORREST RANDALL ; GOPALASHVAMI RADZHESH ; FORREST REHNDEHLL DZH ; FORREST RANDALL G

Inventor(s): FORREST RANDALL G TURNER TIMOTHY GOPALASWAMY RAJES ; FORREST RANDALL G PARK RIDGE ; TURNER TIMOTHY GOPALASWAMY RAJESH FORREST RANDALLG ; TURNER TIMOTHY PORT CHARLOTTE ; GOPALASWAMY RAJESH ALPHARETTA ; RANDALL G FORREST

Agent(s): CULLENS PATENT AND TRADE MARK ATTORNEYS; CULLENS PTY LTD; SMART AND BIGGAR; REGAN ADDIS HEATHER; CAWLEY AIMEE ELIZABETH; PETER M KLOBUCHAR ESQ WALLENSTEIN WAGNER AND ROCKEY LTD; WALLENSTEIN WAGNER AND ROCKEY LTD; IP DEPARTMENT, SCHWARTZ COOPER CHARTERED; IP DEPARTMENT SCHWARTZ COOPER CHARTERED; UNGARETTI AND HARRIS LLP,INTELLECTUAL PROPERTY GROUP – PATENTS; UNGARETTI AND HARRIS LLP INTELLECTUAL PROPERTY GROUP PATENTS; SCHWARTZ COOPER CHARTERED; UNGARETTI AND HARRIS LLP

Designated states:

AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B21D11/10 B21D22/00 B21D51/26 B21D51/44 B65B7/00 B65D1/20 B65D17/32 B65D17/34 B65D17/50 B65D41/00 B65D43/02 B65D51/18 B65D53/06 B65D6/28 B65D6/30 B65D8/04 B65D8/08 B65D8/12 B65D8/18 B65D8/20 (Advanced/Invention); B21D51/44 B65D17/50 B65D43/02 B65D8/18 (Advanced/Non–invention); B21D51/38 B65D17/00 B65D17/28 B65D41/00 B65D6/00 B65D8/04 (Core/Invention)

International class (IPC 1–7): B21D51/30 B21D51/44 B65D1/20 B65D17/34 B65D17/50 B65D41/00 B65D51/18 B65D6/30 B65D8/04 B65D8/08 B65D8/18

CPC: B21D51/383 B65D2517/0062 Y10S220/906 B65D17/08 B65D17/06 B65D17/165 B65D17/502 B65D2517/0007 B65D2517/0011 B65D2517/0061 B65D2517/0076 B65D2517/0079 B65D2517/0082

European class: B21D51/38B B65D17/06 B65D17/08 B65D17/16B2 B65D17/50A1 L65D517/00Y1C L65D517/00Y2A L65D517/00Y7A1 L65D517/00Y7A1A L65D517/00Y7C1 L65D517/00Y7C3 L65D517/00Y7D1

US class: 220/254.1 220/254.100P 220/254.100S 220/269 220/27 220/270 220/270P 220/270S 220/359.1 220/359.100S 220/359.2 220/359.200S 220/364 220/600 220/619 220/906 413/1 413/11 413/17 413/1P 413/4 413/4S 413/56 413/8 413/8P 72/348 72/379.4

Classification Explorer

Cited documents: WO9834743 A1, WO9637414 A1, WO09931497, WO03016155 A1, WO0243895 A1, WO02100512 A1, WO02057148 A1, WO02057137 A2, WO0200512 A1, WO0141948 A2, US7556168 BB, US7350392 BB, US7174762 BB, US7107810 BB, US7036348 BB, US7004345 BB, US7000797 BB, US6772900 BB, US6772900 BA, US6772900 B1, US6702538 BA, US6685417 BB, US6499622 BA, US6428261 BA, US6425721 BA, US6419110 BA, US6296137 BA, US6234337 BA, US6223931 BA, US6089072 A, US6065634 A, US6024239 A, US5964366 A, US5950858 A, US5823730 A, US5812730 A, US5685189 A, US5346087 A, US5174706 A, US5149238 A, US5143504 A, US5105977 A, US5069355 A, US4991735 A, US4832223 A, US4808052 A, US4804106 A, US4722215 A, US4704887 A, US4685849 A, US4680917 A, US4641761 A, US4577774 A, US4571978 A, US4525455 A, US4448322 A, US4434641 A, US4324344 A, US4324343 A, US4274351 A, US4262815 A, US4217843 A, US4116361 A, US4093102 A, US4084721 A, US4055134 A, US4031837 A, US3990376 A, US3957005 A, US3949692 A, US3946683 A, US3945334 A, US3941277 A, US3918378 A, US3905513 A, US3871314 A, US3868919 A, US3853080 A, US3837524 A, US3765352 A, US376352 A, US3705563 A, US3525455 A, US352455 A, US3434623 A, US3186583 A, US3186538 A, US2554264 A, US243895 A, US2303943 A, US2057148 A, US2057137 A, US2008050207 AA, US2006096994 AA, US2006010957 AA, US2005252917 AA, US200512 A, US2005006388 AA, US2004211786 AA, US2004211780 AA, US2004206764 AA, US2004200838 AA, US2004065663 AA, US2003034346 AA, US2002158071 AA, US2002050493 AA, US2002015807 AA, US2001037668 AA, US158071 A, US1558071 A, US141948 A, RU2175585 C2, KR20040018398 A, GB422052 A, FR2577897 A1, DE8228681 U, DE8228681 U, DE8228681, DE2554264 A1, DE2303943 A1, AU107340 A1,

Forward Citations: WO15077469, WO12170635, WO12112487, WO11088679, WO10118134, WO09023554, WO08131172, WO07038066, WO07021388, WO07021388, WO05113351, USD762114, USD750488, USD749415, USD727725, USD715144, USD672235, USD658980, USD640141, US9670049, US9604769, US9540137, US9499299, US9475607, US9446879, US9434505, US9371152, US9352379, US9263921, US9233784, US9199763, US9186924, US9145251, US9114451, US9085026, US9045325, US9016034, US8998027, US8998015, US8973780, US8967407, US8939695, US8931660, US8875936, US8851323, US8844747, US8820571, US8794469, US8757953, US8746489, US8733576, US8727169, US8708188, US8534490, US8534485, US8505765, US8496132, US8490825, US8464570, US8454292, US8371467, US8348086, US8328492, US8313004, US8287220, US8235244, US8205477, US8157119, US8104319, US8052005, US8011527, US7938290, US7743635, US7703624, US7644833, US7591392, US7556168, US7472575, US7350392, US7143623, US7107810, US7036348, US7004345, US6761281, US2015108130, US2013098925, US2012145712, US2012125933, US2012111874, US2012043325, US2012012586, US2011226771, US2011226636, US2011204055, US2011186575, US2011180535, US2011168713, US2011127268, US2011100854, US2011031256, US2011017737, US2010287886, US2010264140, US2010251799, US2010243663, US2010139358, US2010116374, US2010077790, US2010044383, US2010017882, US2009269169, US2009266824, US2009180999, US2009120943,

US2009095752, US2009039091, US2009039090, US2009020543, US2008257900, US2008050207, US2008014050, US2007284374, US2007039961, US2006191940, US2006096994, US2006071005, US2005252922, US2005115976, US2005044921, US2005006388, US2004211780, US2004200838, US2003042258, KR100862404, JP2014530794, JP2009286433, JP2007537107, EP1907150, EP1743719, CN104368687, CN104368687, CN104211001, AU2008287051, AU2008287051, AU2006272664, AU2005245402,

Abstract:
Source: US2003034346A An end member for a container. The end member has a central panel, a circumferential chuckwall, and a transition wall. The central panel is centered about a longitudinal axis and has a substantially planar peripheral edge. The curl defines an outer perimeter of the end member. The circumferential chuckwall extends downwardly from the curl to the transition wall. The transition wall connects the chuck wall with the substantially planar peripheral edge of the central panel. The transition wall has a folded portion extending outwardly relative to the longitudinal axis.

0) US2004238546A – CAN END

2) Family number: 29376168 (US2004238546A) © PatBase

Title: CAN END

Priority: EP20020252800 20020422 EP20030722438 20030410 US20040770791 20040203 US20040979068 20041101 US20090551907 20090901 US20060540238 20060928 WO2003EP03716 20030410 WO2005US39847 20051101 US20120425934 20120321 US20130952757 20130729

Family:

Publication number	Publication date	Application number	Application date
AT415217 E	20081215	AT20030722438T	20030410
AU2003229636 AA	20031103	AU20030229636	20030410
AU2003229636 BB	20080626	AU20030229636	20030410
AU2005302008 AA	20060511	AU20050302008	20051101
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JP4280645 B2	20090617	JP20030585908T	20030410
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US2004238546 AA	20041202	US20040770791	20040203
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US2012175376 AA	20120712	US20120425934	20120321
US2013306658 AA	20131121	US20130952757	20130729
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US8157119 BB	20120417	US20090551907	20090901
US8496132 BB	20130730	US20120425934	20120321
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ZA200408419 A	20050830	ZA20040008419	20041018	
ZA200408419 A	20051130	ZA20040008419	20041018	

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN CORK AND SEAL TECHNOLOGIES CORP ; CROWN PACKAGING TECHNOLOGY INC ; METAL BOX PLC ; WATSON MARTIN ; FIELDS BRIAN ; LOCKLEY ANDREW ROBERT ; WATSON MARTIN J ; CROWN CORK AND SEAL TECH CORP ; CROWN CORK AND SEAL TECHNOLOGI ; KRAUN PEHKEHDZHING TEKNOLODZHI

Assignee(s): DEUTSCHE BANK AG ; WATSON MARTIN JOHN ; DEUTSCHE BANK NEW YORK BRANCH AGENT AG AS ; LOCKLEY ANDREW R ; DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; CROWN CORK AND SEAL TECHNOLOGIES ; CROWN CORK AND SEAL TECHNOLOGIES CO ; KRAUN PEHKEHDZHING TEKNOLODZHI INK ; CARNAUDMETALBOX PLC

Inventor(s):(std)**:** BRIAN FIELDS ; FIELDS BRIAN ; LOCKLEY ANDREW ROBERT ; MARTIN WATSON ; ROBERT LOCKLEY ANDREW ; WATSON MARTIN ; WATSON MARTIN JOHN ; ANDREW ROBERT LOCKLEY ; WATSON MARTIN J ; UOTSON MARTIN ; LOKLI EHNDRJU ROBERT ; LOCKLEY ANDREW R ; FILDZ BRAJAN

Inventor(s): LOCKLEY ANDREW ; MARTIN J WATSON

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; PETER MAXWELL AND ASSOCIATES; FETHERSTONHAUGH AND CO; GOWLING LAFLEUR HENDERSON LLP; RATLIFF ISMAY HILARY; WOODCOCK WASHBURN LLP; BAKER AND HOSTETLER LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B21D51/26 B21D51/38 B21D51/44 B65D1/12 B65D17/00 B65D17/34 B65D25/00 B65D6/28 B65D6/30 B65D8/04 B65D8/06 B65D8/12 B65D8/20 (Advanced/Invention); B65D1/12 B65D17/00 (Advanced/Non–invention); B21D51/38 B65D8/20 (Core/Invention); B21D B65D (Subclass/Invention)

International class (IPC 1–7): B21D51/38 B65D17/00 B65D17/34 B65D6/28 B65D8/04 B65D8/06 B65D8/20

CPC: B65D25/00 B65D2517/0014 B65D2517/0062 B65D2517/0079 Y10S220/906 B65D17/08

European class: B65D17/08 L65D517/00Y2C L65D517/00Y7A1A L65D517/00Y7C3

US class: 220/269 220/600 220/610 220/619 220/623 220/624 220/906

Classification Explorer

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Forward Citations: WO14194058, WO14150673, WO14143820, WO14055399, WO13067398, WO12174058, WO06050465, USD787952, USD770895, USD763969, USD762114, USD751922, USD750488, USD749415, USD727725, USD715647, USD715162, USD715144, USD698668, USD695611, USD685266, USD672235, USD669781, USD658980, USD640141, USD612724, USD602776, USD600116, USD579771, US9580204, US9566634, US9550604, US9540137, US9499299, US9446879, US9371152,

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Abstract:
Source: US2004238546A A can end having a countersink bead, an inclined chuck wall and a strong seam, resists distortion from its circular profile when subjected to thermal processing or when packaging carbonated beverages. This high hoop strength affects the manner in which the can end ultimately fails when placed under extreme abuse conditions, even if buckle pressure performance is within industry specified standards. The can end of the invention has control features introduced which control the failure mode whilst maintaining specified buckle pressure performance. In one embodiment, the control feature comprises expansion of the countersink bead to act as a trigger for local peaking, together with a groove in the chuck wall which prevents the peaking force from being concentrated at a single point which could result in leaking by the production of a pin hole.

0) US2013161325A – RECLOSING CAN FOR FOOD PRODUCT

3) Family number: 50750407 (US2013161325A) © PatBase

Title: RECLOSING CAN FOR FOOD PRODUCT

Priority: EP20100174888 20100901 EP20110764694 20110901 US20110508195P 20110715 WO2011EP54248 20110321 WO2011EP52078 20110211 US20110820185 20110901 WO2011EP65143 20110901

Family:

Publication number	Publication date	Application number	Application date
AU2011298346 AA	20120308	AU20110298346	20110901
AU2011298346 BB	20150219	AU20110298346	20110901
BR112013004761 A2	20160802	BR20131104761	20110901
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CN103167988 A	20130619	CN201180041912	20110901
CN103167988 B	20160120	CN201180041912	20110901
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EA201390321 A1	20130930	EA20130090321	20110901
EP2426058 A1	20120307	EP20100174888	20100901
EP2611705 A1	20130710	EP20110764694	20110901
EP2611705 B1	20170222	EP20110764694	20110901
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JP5986087 B2	20160906	JP20130526479T	20110901
KR20130139250 A	20131220	KR20137008007	20110901
MX2013002376 A1	20130702	MX20130002376	20110901
SG188348 A1	20130430	SG20130015334	20110901
TH129970 A	20131128	TH20131000991	20110901
UA110625 C2	20160125	UA20130003922	20110901
US2013161325 AA	20130627	US20110820185	20110901
US9440767 BB	20160913	US20110820185	20110901
WO12028338 A1	20120308	WO2011EP52078	20110211
WO12028694 A1	20120308	WO2011EP65143	20110901
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ZA201302246 A	20131127	ZA20130002246	20130322

Probable Assignee: EVDS BVBA

Assignee(s):(std)**:** E V D S BVBA ; VANDERSTRAETEN ERWIN ; VAN HAUDENHUYSE ROLAND

Assignee(s): EVDS BVBA

Inventor(s):(std)**:** VAN HAUDENHUYSE ROLAND ; VANDERSTRAETEN ERWIN

Inventor(s): ERWIN VANDERSTRAETEN

Agent(s): SPRUSON AND FERGUSON; SMART AND BIGGAR; BIRD WILLIAM EDWARD; DE BAERE IVO; FUKAMI PATENT OFFICE PC; BACON AND THOMAS PLLC; BIRD WILLIAM E ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/26 B65B7/16 B65D17/00 B65D17/32 B65D17/34 B65D17/347 B65D17/353 B65D17/50 B65D47/36 B65D51/16 B65D51/18 B65D51/22 (Advanced/Invention); B65D17/32 (Core/Invention);

	B65D (Subclass/Invention)
CPC:	B65D17/506 B65D51/22 B21D51/2653 B65B7/16 B65D17/166 B65D2517/0014 B65D2517/0028 B65D2517/0044 B65D2517/0094
European class:	B65D17/16B2B B65D17/50B L65D517/00Y2C L65D517/00Y4A L65D517/00Y5D3 L65D517/00Y8B
US class:	1/1 220/258.2 413/2 53/485 53/492
Classification Explorer	
Cited documents:	WO07147542 A1, WO07147542, US5810189 A, US4784283 A, US4747511 A, US4361249 A, US4316249 A, US4190174 A, US2012248113 AA, US2009206083 AA, US2008314904 AA, US2006289540 AA, US05810189, JP9039962 A2, JP2008546610 T2, JP2008546610, EP2157023 A1, EP2011052078, CN1053403 A,
Forward Citations:	WO17032752, WO16139274, WO16138933, WO14124992, US2016000246, EP3133024,

Abstract:
Source: US2013161325A A can end (2) is described for a metal beverage can, optionally for carbonated drinks, the can end including a cap top (3), arranged in connection to a pull tab (4) configured to remove the cap top along a pre−defined groove (9), to thereby create a drinking or pouring aperture; an elastic resilient element (10) attached to the can end; and a resiliently operated shut−off valve (6) that is part of or is connected to the elastic resilient element (10) and that is configured to seal the drinking or pouring aperture after drinking or pouring; wherein the cap top (3) is configured to remain located, after the removal, on top of the shut−off valve (6). Further, a can including such a can end, and a method for opening and reclosing such a can are described, as well as a method for producing such a can.

4) Family number: 46628648 (US2012024160A) © PatBase

Title: COFFEE BEAN PACKAGING CARTRIDGE AND COFFEE BEVERAGE SYSTEM INCLUDING SAME

Priority:

AU20100216509	20100217	AU20110216590	20110217	EP20100705202	20100217
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EP20110154887	20110217	EP20130179296	20100217	NL20092002542	20090217
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US20120587730	20120816				

Family:

Publication number	Publication date	Application number	Application date
AU2010216509 AA	20100826	AU20100216509	20100217
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WO11102721 A3	20120216	WO2011NL50115	20110217	

Probable Assignee: DOUWE EGBERTS BV KONINKLL

Assignee(s):(std)**:** GRAAFF GERBRAND KRISTIAAN ; KNEPPERS JOB LEONARDUS ; KONINKL PHILIPS ELECTRONICS NV ; KNITEL JOSEPH THEODOOR ; KONINK DOUWE EGBERTS B V ; KONINK DOUWE EGBERTS BV ; KONINKL DOUWE EGBERTS BV ; KONINKL PHILIPS NV ; KONINKLEJKE DAUVE EGBERTS BV ; KONIKLIJKE DOUWE EGBERTS BV ; MOORMAN CHRIS J M ; DE GRAAFF GERBRAND KRISTIAAN ; DILLON CHARLES KEVIN ; DOUWE EGBERTS BV ; DOUWE EGBERTS BV KONINKLL ; MOORMAN CHRISTIAAN JOHANNES MARIA ; SARA LEE ; PHILIPS ELECTRONICS N V KONINKLL ; KONINKLEJKE DAUVE EHGBERTS BV ; KONINKLEJKE FILIPS ELEKTRONIKS N V ; KONINKLEJKE FILIPS ELEKTRONIKS NV ; ROYAL DUTCH PHILIPS ELECTRONICS LTD ; PHILIPS KONINKLL NV ; KONINL PHILIPS ELECTRONICS NV ; SARA LEE DE NV ; VAN OS IVO ; VERSLUIJS RICHARD PATRICK ; SARA LEE DE B V ; SARA LEE DE BV

Assignee(s): SARA LEE DE N V NULL ; SARA LEE DE N V ; KONINKLEJKE FILIPS EHLEKTRONIKS NV ; KONINKLIJKE PHILIPS NV ; KONINKLIJKE DOUWE EGBERTS BV ; PHILIPS ELECTRONICS KONINKLL NV ; KONINKLIJKE PHILIPS ELECTRONIC N V ; KONINKLIJKE PHILIPS ELECTRONICS N V NULL ; PHILIPS ELECTRONIC KONINKLL NV ; KONINKLIJKE DOUWE EGBERTS B V ; DOUWE EGBERTS KONINKLL BV ; KONINKLIJKE PHILIPS ELECTRONICS N V

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Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; FETHERSTONHAUGH AND CO; JANSEN CORNELIS MARINUS; VO; DURAN LUIS ALFONSO; LAZCANO JESUS; CABINET BEAU DE LOMENIE; OKABE YUZURU; TAKAHASHI SEIICHIRO; OCHI TAKAO; MATSUI TAKAO; MATSUI MITSUO; FOLEY AND LARDNER LLP; HATZMANN M J; JANSEN C M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A23F5/00 A23F5/08 A23F5/26 A23L1/28 A47J31/00 A47J31/057 A47J31/06 A47J31/10 A47J31/34 A47J31/36 A47J31/40 A47J31/42 A47J31/44 A47J31/46 A47J42/40 A47J42/42 A47J42/50 B65B1/04 B65B1/12 B65B3/04 B65D83/04 B65D83/06 B65D85/00 B65D85/804 (Advanced/Invention);
A47J31/36 A47J31/52 B65D85/804 (Advanced/Non–invention);
A47J31/40 A47J31/42 A47J42/00 (Core/Invention)

International class (IPC 1–7): A47J31/40 A47J31/42 A47J42/50

CPC: A23F5/26 B65B1/12 A23F5/262 A47J31/404 A47J31/3614 A47J31/52 B65D85/8043 A47J31/42 A47J31/44 A47J42/00 A47J31/00 A47J31/40 A47J42/50

European class: A47J31/40 A47J31/42 A47J42/50

US class: 1/1 141/1 141/108 141/311R 141/331 141/344 141/386 141/67 241/6 426/115 426/115S 426/231 426/433 426/518 99/280 99/280P 99/285 99/286 99/289R

Classification Explorer

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Forward Citations: WO16113258, WO15180803, WO15104192, WO15078662, WO14185783, WO14184777, WO14045230, WO14045196, WO13057625, WO13057625, WO13048707, WO11102721, USD752910, USD751330, USD750408, USD750407, USD745306, USD745305, USD745304, USD745303, USD743729, USD743198, USD742158, USD741638, US9648982, US9622618, US9510710, US9439390, US9428329, US9428328, US9414710, US9339141, US9277838, US9265377, US9011955, US8944354, US8776671, US8763942, US2016095462, US2016015215, US2015351421, US2015157167, US2015144720, US2015118367, US2014361107, US2014007775, US2013213240, US2013101717, US2013095218, US2012138721, US2011256273, RU2596961, JP5966098, JP5702868, JP5599125, JP2016514978, JP2014533159, JP2014530700, JP2014530684, JP2014506828, JP2014506820, JP2012517879, ITMI20131974, FR3031441, EP3135161, EP3028609, EP2436288, DE202011109913, CN104812278, CN104159480, CN104159480, CN103874440, CN103654464, AU2012324492,

Abstract:
Source: US2012024160A A coffee bean packaging cartridge for holding and supplying multiple servings of coffee beans can be connected to a coffee beverage system. The cartridge includes a container having an outer wall defining an interior volume and an opening at one end thereof. A permanent, preferably non−removable closure member is fitted to the one end of the container and substantially covers the opening. An exit passage in the closure member, defines a coffee bean outlet, for transferring coffee beans from the interior volume. The closure member further has relatively movable closing means for selectively closing the exit passage to reduce exposure of the coffee bean contents to surrounding air. The cartridge further includes connecting means for connecting the cartridge to a coffee beverage system. There is also provided a coffee beverage system that includes the coffee bean packaging cartridge as defined above and at least a dosing device and a grinding mechanism. The dosing device may includes a metering chamber for receiving a portion of coffee beans corresponding to an amount necessary for preparing a single serving of coffee beverage.

0) US2013075296A – MARKING OF CAN ENDS AND/OR PULL TABS USING PHOT...

5) Family number: 53291841 (US2013075296A)

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Title: MARKING OF CAN ENDS AND/OR PULL TABS USING PHOTONICALLY SENSITIVE INK

Priority: AU20120316033 20120927 AU20160201319 20160301 US20120628968 20120927 US20120347796 20120927 US20120345547 20120927 US20110539784P 20110927 US20120629071 20120927 WO2012US57507 20120927 WO2012US57518 20120927

Family:

Publication number	Publication date	Application number	Application date
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AU2012316040 AA	20130404	AU20120316040	20120927
AU2016201319 AA	20160317	AU20160201319	20160301
AU2016201319 BB	20170504	AU20160201319	20160301
BR112014007448 A2	20170404	BR20141107448	20120927
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US9278776 BB	20160308	US20120345547	20120927
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WO13049313 A3	20130523	WO2012US57507	20120927
WO13049320 A1	20130404	WO2012US57518	20120927

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

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Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B05D3/06 B21D51/38 B21D51/44 B23K26/00 B23K26/36 B41M5/26 B41M5/28 B41M5/30 B41M5/323 B41M5/46 B65B43/00 B65D17/00 B65D17/34 B65D17/347 B65D17/353 B65D25/20 B65D41/32 B65D51/00 B65D51/24 G06K1/12 G06K19/06 G06K19/10 G06K7/00 (Advanced/Invention);
B21D51/38 B41M5/24 (Advanced/Non–invention);
B41M5/26 B65D17/00 G06K19/06 (Core/Invention);
B41M B65D G06K (Subclass/Invention)

CPC: B65D17/161 B21D51/383 B65D41/32 B41M5/24 B41M5/28 B65D17/165 B65D2517/0052 B65D2517/0053 B65B61/26 B65D51/245 B65B43/00 B65D51/00 B23K26/364 B23K26/361

US class: 1/1 206/459.5 219/121.85 220/212 220/270 220/273 413/14 413/18 413/25 427/556 53/492

Classification Explorer

Cited documents: WO9909853 A2, WO9711892 A1, WO9530546 A1, WO09093028 A2, WO07007102 A2, WO05068207 A1, WO02068205 A1, WO0183308 A1, WO0168460 A2, WO0043456 A1, WO0003832 A1, US8543424 BB, US7914640 BB, US7485403 BB, US7150597 BB, US6926487 BA, US6854947 BB, US6777098 BB, US6706995 BB, US6634516 BB, US6602595 BB, US6590183 BA, US6501046 BA, US6498318 BA, US6479787 BA, US6476349 BA, US6433302 BA, US6157314 A, US6105806 A, US6080958 A, US6019831 A, US6017972 A, US5992892 A, US5928780 A, US5911921 A, US5884079 A, US5682983 A, US5578120 A, US5511920 A, US5492077 A, US5489639 A, US5350792 A, US5273149 A, US5053440 A, US4880137 A, US4559961 A, US4559729 A, US4476781 A, US4375025 A, US3898417 A, US2013270269 AA, US2013196037 AA, US2012205386 AA, US2011226636 AA, US2011111142 AA, US2011100854 AA, US2011084051 AA, US2010264215 AA, US2010193519 AA, US2010078010 AA, US2010058630 AA, US2010056830 AA, US2010015558 AA, US2009117353 AA, US2007080229 AA, US2005270358 AA, US2005045637 AA, US2004108237 AA, US2003192211 AA, US2001011431 AA, JPS4982340, JP8127670 A2, JP4982340 B2, JP49082340 A2, JP2011020701 A2, JP2011016546 A2, JP2010004523 A2, JP2005324816 A2, JP2001063729 A2, JP11001065 A2, GB2309215 A1, EP1365923 B1, EP1365923 A1, EP1218248 B1, EP1218248 A2, EP1113901 A1, EP0993964 A2, EP0797511 A1, EP0522370 A1, DE10254060 A1, CN201890427 U, CN101445170 A, CA2307074 AA, CA2301655 AA, CA2301655,

Forward Citations: WO17012344, WO17008725, WO16192419, WO16183452, WO15013081, WO14072455, WO14072455, USD776530, USD688553, US9340368, US9259913, CN105819062, CN105691824, CN105517924, CN105398647, CN105151470, CN105151469, AU2014293487,

Abstract:
Source: US2013075296A A system and method for laser marking can ends, especially pull tabs, includes coating a portion of the can end and/or pull tab with a lacquer having a photonically active material and directing a laser to the lacquer to alter the appearance of the of the photonically active material to form an image, especially a high resolution image. The decorated can end and/or tabs may have a high resolution image.

6) Family number: 41968247 (US2009173737A) © PatBase

Title: RESEALABLE BEVERAGE CAN END AND METHODS RELATING TO SAME

Priority: EP20080847064 20081107 EP20120193488 20081107 US20070986955P 20071109 GB20080007762 20080429 GB20080015360 20080822 US20080267159 20081107 WO2008US82753 20081107 US20120685085 20121126 US20110202224 20111104 US20130835562 20130315 WO2010EP52159 20100219

Family:

Publication number	Publication date	Application number	Application date
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AU2008323856 BB	20131121	AU20080323856	20081107
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Inventor(s): RAMSEY CHRISTOPHER PAUL WANTAGE ; ALTHORPE CHRISTOPHER PENYLAN ; PRESTIDGE MARK JONATHAN FARINGDON

Agent(s): PETER MAXWELL AND ASSOCIATES; SMART AND BIGGAR; MARKS AND CLERK LUXEMBOURG LLP; SMITH DEBRA JANE CLARE; LIND ROBERT; CARPINTERO MARIO; WOODCOCK WASHBURN LLP; BAKER AND HOSTETLER LLP; FULLMER HAROLD H ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/40 B21D51/44 B65D17/00 B65D17/28 B65D17/34 B65D17/50 B65D41/32 B65D43/04 B65D51/16 B65D51/18 B65D51/20 B65D51/22 (Advanced/Invention); B65D17/00 B65D51/16 B65D51/18 B65D51/22 (Core/Invention)

CPC: B65D51/20 B65D17/165 B21D51/40 B21D51/443 B65D17/506 B65D2101/0023 B65D2205/02 B65D2517/5091

European class: B65D17/50B L65D101/00A3 L65D205/02 L65D517/50Q99

US class: 220/254.3 220/254.9 220/258.2 220/258.200P 220/258.5 220/258.500S 220/259.1 220/259.100S 220/259.5 220/269 220/361 413/15 413/4 413/8

Classification Explorer

Cited documents: WO9836987 A1, WO9609968 A1, WO9504709 A1, WO9110600 A1, WO09062004, WO08068169 A1, WO08054636 A2, WO07128810 A1, WO07039367 A1, WO04056667, WO03062084 A1, WO0200512 A1, WO0128875 A1, US7198168 BB, US7168586 BB, US7152766 BA, US6763963 BA, US6626314 BA, US6588617 BA, US6581264 BB, US6105806 A, US6065634 A, US5947317 A, US5829610 A, US5813561 A, US5711447 A, US5692633 A, US5622273 A, US5615808 A, US5351853 A, US5335808 A, US5242073 A, US5199618 A, US5199591 A, US5148935 A, US5085338 A, US4951835 A, US4930654 A, US4915290 A, US4821912 A, US4746032 A, US4681238 A, US4676411 A, US4576306 A, US4540611 A, US4462504 A, US4440310 A, US4431110 A, US4407423 A, US4397403 A, US4397400 A, US4369888 A, US4361244 A, US4266688 A, US4170724 A, US4150777 A, US4136797 A, US4127221 A, US4122970 A, US4113134 A, US4098439 A, US4054205 A, US3952911 A, US3910410 A, US3871544 A, US3788512 A, US3744662 A, US3705670 A, US3622034 A, US3520440 A, US3450301 A, US3447713 A, US3406867 A, US3386613 A, US3287053 A, US3262612 A, US3250425 A, US3190410 A, US2011233227 AA, US2010294768 AA, US2009179033 AA, US2008314904 AA, US2008110887 AA, US2008053997 AA, US2007262079 AA, US2007215620 AA, US2007164026 AA, US2007145055 AA, US2007068943 AA, US2006201944 AA, US2006163253 AA, US2005173453 AA, US2005150889 AA, US2005115977 AA, US2005051553 AA, US2003178433 AA, US2003062370 AA, US2002050493 AA, RU2309099 C2, NZ529214 A, KR200017742 A, KR20000017742 A, JPS6148128, JP61048128 A2, JP2003112735 A2, JP2003054549 A2, GB2320008 A1, GB2154561 A1, FR1434827 A, EP1767464 A1, EP0828663 B1, EP0305598 A1, EP0088185 A1, AU2007247102 AA,

Forward Citations: WO17016686, WO16130705, WO14137582, WO12095593, WO11124552, USD781707, USD762114, USD757541, USD750488, USD749415, USD747649, USD747199, USD727725, USD715647, USD715144, USD617136, US9637269, US9517866, US9463910, US9446879, US9272823, US9272819, US9233784, US8985371, US8931656, US8857644, US8844761, US8844744, US8833585, US8807340, US8336726, US8336725, US8240498, US8157435, US7918359, US2016000246, US2013228586, US2012012586, US2011233227, US2011203368, US2011006062, US2010294768, US2010232256, US2009179033, US2008110887, US2007262079, US2007068943, JP2013523548, GB2528619, FR2970239, EP2432704, CN105473455, CN104520202, CN102917958,

Abstract:
Source: US2009173737A A recloseable and resealable beverage can end closure includes a base plate beneath the center panel and a tab plate above the center panel. The closure is slidable relative to the center a panel to uncover the pour aperture and then to position the closure over the pour aperture to enable resealing.

0) US2011308202A – CAN END

7) Family number: 44512026 (US2011308202A) © PatBase

Title: CAN END

Priority: EP20080163704 20080904 WO2009EP60243 20090806

Family:

Publication number	Publication date	Application number	Application date
AT509843 E	20110615	AT20080163704T	20080904
AU2009289732 AA	20100311	AU20090289732	20090806
AU2009289732 AB	20110623	AU20090289732	20090806
AU2009289732 BB	20150903	AU20090289732	20090806
BRPI0918041 A2	20151201	BR2009PI18041	20090806
CA2735911 AA	20100311	CA20092735911	20090806
CA2735911 C	20170411	CA20092735911	20090806
DE602008007046 D1	20110630	DE200860007046T	20080904
EP2161207 A1	20100310	EP20080163704	20080904
EP2161207 B1	20110518	EP20080163704	20080904
ES2366162 T3	20111017	ES20080163704T	20080904
JP2013500905 T2	20130110	JP20110525491T	20090806
JP5787758 B2	20150930	JP20110525491T	20090806
MX2011002453 A1	20110421	MX20110002453	20090806
TH105198 A	20101127	TH20091003682	20090813
US2011308202 AA	20111222	US20090062321	20090806
US9016034 BB	20150428	US20090062321	20090806
WO10026019 A1	20100311	WO2009EP60243	20090806
ZA201101557 A	20111026	ZA20110001557	20110228

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC ; HALL JASON JOHN

Assignee(s): DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; CROWN PACKAGING TECHNOLOGY INC ALSIP

Inventor(s):(std)**:** HALL JASON ; HALL JASON JOHN ; JOHN HALL JASON

Inventor(s): JASON JOHN HALL

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; FETHERSTONHAUGH AND CO; CALLIES RAINER DIPL PHYS DRRERNAT; RATLIFF ISMAY HILARY; BAKER AND HOSTETLER LLP; RATLIFF ISMAY

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65B1/04 B65B61/24 B65B63/08 B65B7/28 B65D17/00 B65D17/28 B65D17/32
B65D17/34 (Advanced/Invention);
B65D17/28 (Advanced/Non–invention);
B65D17/00 B65D17/28 (Core/Invention);
B65D (Subclass/Invention)

International class (IPC 1–7): B65D17/00

CPC: B65B7/2857 B65B61/24 B65B63/08 B65D17/163 B65D2517/0073 B65D2517/0089

European class: B65D17/16B1 L65D517/00Y7B3 L65D517/00Y7Z

US class: 220/269 220/270 220/270S 220/624 413/2 53/420 53/440 53/467 53/467P 53/471 53/485

Classification Explorer

Cited documents: WO08104392 A1, WO08104392, WO08098761 A1, WO08098761, WO07039367, WO06112765, WO03104092 A1, WO0208074, WO0128875, USD579771 S1, USD568741 S1, USD565406 S1, USD520358 S1, USD432015 S1, USD421907 S1, USD382481 S1, USD352898 S1, USD332402 S1, USD321326 S1, USD312404 S1, USD307720 S1, USD278980 S1, USD263803 S1, USD243833 S1, USD226073 S1, USD226071 S1, USD224209 S1, USD221930 S1, USD219370 S1, USD200021 S1, US8104319 BB, US7909196 BB, US7617945 BB, US7500376 BB, US7407061 BB, US7341163 BB, US7305861 BB, US7174762 BB, US7168586 BB, US6723360 BA, US6702538 BA, US6427861 BA, US6290447 BA, US6206220 BA, US6202881 BA, US6138856 A, US6105806 A, US6089072 A, US6059137 A, US6024239 A, US601787 A, US5947317 A, US5813561 A, US5804237 A, US5749257 A, US5743445 A, US5730314 A, US5685189 A, US5671860 A, US5622273 A, US5593063 A, US5581978 A, US5502995 A, US5413241 A, US5335808 A, US5307947 A, US5199618 A, US5169017 A, US5069356 A, US5064087 A, US5011037 A, US4836398 A, US4747511 A, US4722215 A, US4716755 A, US4701090 A, US4680917 A, US4674649 A, US4571978 A, US4559729 A, US4557398 A, US4524879 A, US4503989 A, US4463866 A, US4458469 A, US4442950 A, US4397400 A, US4369888 A, US4363419 A, US4361244 A, US4333581 A, US4266688 A, US4252247 A, US4205760 A, US4150777 A, US4030631 A, US4015744 A, US3986633 A, US3967752 A, US3952911 A, US3951299 A, US3941277 A, US3938696 A, US3930592 A, US3929251 A, US3905513 A, US3863801 A, US3839843 A, US3838788 A, US3779417 A, US3762596 A, US3744662 A, US3724709 A, US3704140 A, US3703979 A, US3674171 A, US3662916 A, US3650387 A, US3643833 A, US3559843 A, US3477608 A, US3404801 A, US3401821 A, US3400853 A, US3369689 A, US3221924 A, US3160302 A, US3152711 A, US2971671 A, US2759307 A, US2261117 A, US2124959 A, US2054066 A, US2010287886 AA, US2010116374 AA, US2010021270 AA, US2008314906 AA, US2008197132 AA, US2008110888 AA, US2008078764 AA, US2007278230 AA, US2007215620 AA, US2007108209 AA, US2007068943 AA, US2006060582 AA, US2005263481 AA, US2005224497 AA, US2005210835 AA, US2005150889 AA, US2004259235 AA, US2003110736 AA, US2002113069 AA, US1570732 A, NL7416818, KR200017742, JP6148128, JP56106747 A2, JP51040660 U1, JP51040660 U, JP51040660 U, JP4044950 A2, JP2004091015 A2, JP2003112735, JP2003054549, JP2002160733, JP1182247 A2, JP1182247, GB2320008 A1, GB1533959, GB1316484 A, FR2826939, EP1964784 A1, EP1958882 A1, EP1577222, EP0521642 A1, EP0088185, DE2540362 A1,

Forward Citations: WO15099636, US9033174, US8998015, US8534485, US8454292, US2012279967, US2012125933, US2012043325, EP2969818,

Abstract:
Source: US2011308202A An easily openable can end (1) is disclosed including an end panel (2), a score line (3) formed in the end panel to define a prearranged opening area, a tab (10), the tab having a handle (12), tab securing means (20) for securing the tab to the end panel. In particular, the end panel of the can end is provided with at least one moveable portion (7) contactable with the lower surface of the tab at a location between the tab securing means and the end of the handle of the tab, the moveable portion being deformable upwardly under influence of pressure (p) to push against the lower surface of the tab and thereby incline (a) the handle of the tab away from the end panel to define a gap (d2) under the tab for finger access by a user. Also disclosed are various methods by which the pressure may be induced into a container incorporating the easily openable can end.

0) US2011163096A – RE–CLOSABLE CAN END LID WITH A ROTATABLE OPENIN...

8) Family number: 44214133 (US2011163096A) © PatBase

Title: RE–CLOSABLE CAN END LID WITH A ROTATABLE OPENING AND RE–SEALING TAB AND DRINK CAN EQUIPPED WITH THE RE–SEALABLE CAN END LID

Priority: DE200810031667 20080704 EP20080804040 20080911 WO2008EP62075 20080911

Family:

Publication number	Publication date	Application number	Application date
AU2008358819 AA	20100107	AU20080358819	20080911
AU2008358819 BB	20121213	AU20080358819	20080911
BRPI0822918 A2	20150623	BR2008PI22918	20080911
CA2728443 AA	20100107	CA20082728443	20080911
CA2728443 C	20140211	CA20082728443	20080911
CN102123917 A	20110713	CN200880130216	20080911
CN102123917 B	20140430	CN200880130216	20080911
CY1117305 T1	20170426	CY20161100111T	20160210
DE102008031667 A1	20100114	DE200810031667	20080704
DE602008041165 D1	20151224	DE200860041165T	20080911
DK2310281 T3	20160215	DK20080804040T	20080911
EP2310281 A1	20110420	EP20080804040	20080911
EP2310281 B1	20151111	EP20080804040	20080911
EP3009369 A1	20160420	EP20150193367	20080911
ES2562440 T3	20160304	ES20080804040T	20080911
HR20160149 T1	20160311	HR20160000149	20160210
HU026167 T2	20160530	HU20080804040T	20080911
IL210440 A0	20110331	IL20080210440	20080911
IL210440 A1	20150430	IL20080210440	20080911
JP2011526230 T2	20111006	JP20110515133T	20080911
JP5409781 B2	20140205	JP20110515133T	20080911
KR101317061 B1	20131011	KR20117002290	20080911
KR20110036822 A	20110411	KR20117002290	20080911
MX2010014285 A1	20110523	MX20100014285	20080911
NZ590021 A	20120727	NZ20080590021	20080911
PT2310281 T	20160317	PT20080804040T	20080911
RS20110486 A1	20120831	RS20110000486	20080911
RS54107 B1	20151030	RS20110000486	20080911
RU2011102838 A	20120810	RU20110102838	20080911
RU2464211 C1	20121020	RU20110102838	20080911
SA3447 B1	20140617	SA20090300430	20090701
SI2310281 T1	20160331	SI20080031580T	20080911
TH105142 A	20101127	TH20091002952	20090630
TW201028341 A	20100801	TW20090122577	20090703
TWI439396 B	20140601	TW20090122577	20090703
UA101372 C2	20130325	UA20100105967	20080911
US2011163096 AA	20110707	US20080002642	20080911
US8434635 BB	20130507	US20080002642	20080911
WO10000340 A1	20100107	WO2008EP62075	20080911
ZA201100083 A	20111026	ZA20110000083	20110104

Probable Assignee: IMV INNOVATION MARKETING U VERTRIEBS GMBH

Assignee(s):(std): ANDRE WICHELHAUS ; IMF INNOVEHJSHN MARKETING U FERTRIBS GMBKH ; IMF INNOVEHJSHN MARKETING UND FERTRIBS GMBKH ; IMV INNOVATION MARKETING U V ; IMV INNOVATION MARKETING U VERTRIBS GMBH ; IMV INNOVATION MARKETING UND V ; WICHELHAUS ANDRE ; IMV INNOVATION MARKETING UND VERTRIEBS GMBH ; IMV INNOVATION MARKETING U VERTRIEBS GMBH ; IMV INNOVTION MARKETING UND VERTRIEBS GMBH ; IMV INNOVTION MARKETING U VERTRIEBS GMBH

Assignee(s): IMV INNOVATION MARKETING UND VERTRIEBS GMBHDE

Inventor(s):(std): VIKHEL KHAUS ANDRE ; WICHELHAUS ANDRE ; ANDRE WICHELHAUS

Inventor(s): VIKHEL'KHAUS ANDRE

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; FB RICE; BLAKE CASSELS AND GRAYDON LLP; VIERING JENTSCHURA AND PARTNER MBB PATENT U RECHTSANWAELTE; VIERING JENTSCHURA AND PARTNER; VIERING JENTSCHURA AND PARTNER PATENT U RECHTSANWAELTE; VIERING JENTSCHURA AND PARTNER MBB PATENT U RECHTSANWAELTE; LLAGOSTERA MARIA DEL CARMEN; PEARL COHEN ZEDEK LATZER BARATZ; SCHLEE IP INTERNATIONAL P C; ALEXANDER R; SCHLEE IP INT PC; VIERING HANS MARTIN

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B23P11/00 B31B1/00 B65D B65D17/00 B65D17/28 B65D17/32 B65D17/34 B65D17/44 B65D39/00 B65D39/02 B65D39/04 (Advanced/Invention); B65D17/28 B65D17/34 B65D17/44 (Advanced/Non–invention); B65D17/00 B65D17/28 B65D17/32 B65D17/34 (Core/Invention); B65D17/32 B65D17/34 (Core/Non–invention); B65D (Subclass/Invention)

International class (IPC 1–7): B65D17/00 B65D17/28 B65D17/32 B65D17/34

CPC: Y10T29/49947 B65D17/166 B65D2517/0014 B65D2517/0034 Y02W30/807

European class: B65D17/16B2B L65D517/00Y2C L65D517/00Y5A1

US class: 220/270 29/525.01 493/52 493/52S

Classification Explorer

Cited documents: WO06009483 A2, WO06000020 A1, US7500577 BB, US6059137 A, US5129773 A, US4877129 A, US4865215 A, US4463866 A, US4442950 A, US4433792 A, US4018178 A, US3820681 A, US3625392 A, US3325043 A, US3223277 A, US2120186 A, US2007062946 AA, US2006163254, TWM317400, TWM305182, JP2006510553 T2, JP2004001782 A2, JP11091779 A2, FR2826940 A1,

Forward Citations: US9333289, US2012012586, US2011036840, CN105416765, CN103318510, CN103003164, CN103003164, AU2013202423,

Abstract:
Source: US2011163096A Re–closable can end lid with a rotatable opening and re–sealing tab, and drink can equipped with the re–sealable can end lid, wherein a lid plate (2) includes a break–away portion (8) surrounded by a predetermined break–line (9) that is separable from the lid plate by the press portion (21) of an opening tab (20) in an opening position of the tab, so that an aperture (10) is created in the lid plate that is surrounded by a ring–wall (11) on the outside of the predetermined break–line (9). On a grip portion (22) of the opening tab (20), a sealing attachment (25) is formed that, after rotating the opening tab (20) into a closing rotating position, fits into a recess surrounded by the ring–wall and sealingly engages on the inner face of the ring–wall (11) along its outer circumferential sealing rim.

0) US2012263835A – CAN END WITH STRENGTHENING BEAD CONFIGURATION

9) Family number: 50537122 (US2012263835A) © PatBase

Title: CAN END WITH STRENGTHENING BEAD CONFIGURATION

Priority: US20100377154F 20101018 US20110249527 20110930 US20110398281F 20110728 US20110377154F 20101018 US20120531060 20120622 US20130455852F 20130524 US20150613041 20150203

Family:

Publication number	Publication date	Application number	Application date
US2012263835 AA	20121018	US20120531060	20120622
US2013026169 AA	20130131	US20110249527	20110930
US2015166216 AA	20150618	US20150613041	20150203
US8978915 BB	20150317	US20120531060	20120622
US9550604 BB	20170124	US20150613041	20150203
USD653109 S1	20120131	US20100377154F	20101018
USD685266 S1	20130702	US20110398281F	20110728
USD695611 S1	20131217	US20130455852F	20130524

Probable Assignee: SILGAN CONTAINERS LLC

Assignee(s):(std)**:** BLOEDORN ROHM E ; BURLESON JR LYNN A ; GUST DONALD M ; PHILLIPS JOHN L ; SILGAN CONTAINERS LLC ; STOLLE MACHINERY CO LLC ; STAMMEN DENNIS C

Assignee(s): STOLLE MACHINERY COMPANY LLC

Inventor(s):(std)**:** BLOEDORN ROHM E ; BURLESON JR LYNN A ; GUST DONALD M ; PHILLIPS JOHN L ; STAMMEN DENNIS C

Agent(s): REINHART BOERNER VAN DEUREN SC; ECKERT SEAMANS CHERIN AND MELLOTT LLC; GRANT E; REINHART BOERNER VAN DEUREN S C

International class(IPC 8–9)**:** B65D1/14 B65D17/00 B65D17/34 B65D17/40 B65D41/32 B65D51/18 B65D6/28 B65D6/34 B65D8/00 B65D85/00 (Advanced/Invention)

CPC: B65D7/36 B65D17/08 B65D2517/0062 B65D7/44 B65D17/163 B65D2517/0013 B65D2517/007 B65D2517/0073 B65D2517/0079

US class: 220/255.1 220/260 220/270 220/276 220/615 426/122 426/131 D9/435 D9/436 D9/438 D9/454

Locarno class: 09/07

Classification Explorer

Cited documents: USRE42485 E, USRE33217 E, USD695611 S1, USD685266 S1, USD653109 S1, USD650278 S1, USD650276 S1, USD634193 S1, USD600118 S1, USD600117 S1, USD597839 S1, USD568741 S1, USD565406 S1, USD520358 S1, USD421907 S1, USD352898 S1, USD337521 S1, USD226073 S1, USD219370 S1, US8454292 BB, US8205477 BB, US7942030 BB, US7938290 BB, US7922025 BB, US7819275 BB, US7770430 BB, US7743635 BB, US7677404 BB, US7614520 BB, US7591392 BB, US7552612 BB, US7506779 BB, US7500376 BB, US7493790 BB, US7478550 BB, US7472575 BB, US7434433 BB, US7370774 BB, US7305861 BB, US7302822 BA, US7270246 BB, US7240531 BB, US7147122 BB, US7143623 BA, US7124613 BA, US7107928 BB, US7107810 BB, US7036348 BB, US6935826 BB, US6877941 BB, US6848875 BB, US6702538 BA, US6688832 BA, US6666933 BB, US6575684 BB, US6460723 BB, US6102243 A, US6089072 A, US6079249 A, US6065634 A, US6004089 A, US5971259 A, US5685189 A, US5671860 A, US5331836 A, US5149238 A, US5042284 A, US5038956 A, US4994009 A, US4977772 A, US4955223 A, US4930658 A, US4865506 A, US4808052 A, US4577774 A, US4434641 A, US3724709 A, US3698590 A, US3674171 A, US3416699 A, US2013026169 AA, US2012263835 AA, US2011303672 AA, US2011006065 AA, US2010287886 AA, US2010243663 AA, US2010163560 AA, US2010126994 AA, US2010116374 AA, US2010108679 AA, US2010059530 AA, US2009212004 AA, US2009020543 AA, US2008314906 AA, US2007215620 AA, US2005082291 AA, US2004099665 AA, US2001037668 AA,

Forward Citations: WO15183812, USD770895, USD763686, USD762114, USD711228, USD695611, USD685266, US9616483, US9550604, US9376233, US8978915, US2016031613, US2015144633, US2014193223,

Abstract:
Source: US2012263835A A can end that is attached to a metal can body with a bottom end forming a cavity that may be filled with food, liquid, etc. The can end is made of metal with a bead configuration located in the outer circumference of the can end that increases its resistance to deformation when subjected to high pressure cooking environments and assists in preventing the can end from separating along the frangible score.

0) US2011186575A – CAN END

10) Family number: 43546402 (US2011186575A) © PatBase

Title: CAN END

Priority: EP20080150424 20080118 EP20090701639 20090113 WO2009EP50326 20090113

Family:

Publication number	Publication date	Application number	Application date
AU2009204845 AA	20090723	AU20090204845	20090113
AU2009204845 BB	20131121	AU20090204845	20090113
CA2711387 AA	20090723	CA20092711387	20090113
CA2711387 C	20160607	CA20092711387	20090113
CN101910008 A	20101208	CN200980102434	20090113
CN101910008 B	20120523	CN200980102434	20090113
DE602009033312 D1	20151015	DE200960033312T	20090113
EP2252522 A1	20101124	EP20090701639	20090113
EP2252522 B1	20150902	EP20090701639	20090113
ES2550780 T3	20151112	ES20090701639T	20090113
HU026682 T2	20160728	HU20090701639T	20090113
JP2012515118 T2	20120705	JP20100542609T	20090113
JP5520232 B2	20140611	JP20100542609T	20090113
MA32079 B1	20110201	MA20100033086	20100813
MX2010007834 A1	20100811	MX20100007834	20090113
RU2010134424 A	20120227	RU20100134424	20090113
RU2486118 C2	20130627	RU20100134424	20090113
UA99944 C2	20121025	UA20100100002	20090113
US2011186575 AA	20110804	US20090812157	20090113
US9199763 BB	20151201	US20090812157	20090113
WO09090171 A1	20090723	WO2009EP50326	20090113

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** BREHELIN LAURE HELENE MARIE ; CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC ; DUNWOODY PAUL ROBERT ; KRAUN PEHKEHDZHING TEKNOLODZHI INK ; PAILLET LAURE HELENE MARIE

Assignee(s): CROWN PACKAGING TECHNOLOGY INC ALSIP ; DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS

Inventor(s):(std)**:** BREEHLEHN LOR EHLEN MARI ; BREHELIN LAURE HELENE MARIE ; DANVUDI POL ROBERT ; DUNWOODY PAUL ROBERT ; LAURE HELENE MARIE BREHELIN ; MARIE BREHELIN LAURE HELENE ; PAILLET LAURE HELENE MARIE ; ROBERT DUNWOODY PAUL

Inventor(s): PAUL ROBERT DUNWOODY ; HELENE MARIE BREHELIN LAURE

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; FETHERSTONHAUGH AND CO; MARKS AND CLERK LUXEMBOURG LLP; WILLIAMS ANDREW RICHARD; LIND ROBERT; CARPINTERO MARIO; BAKER AND HOSTETLER LLP; RATLIFF ISMAY

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/28 B65D17/34 B65D17/347 B65D17/353 B65D17/40 B65D41/32 (Advanced/Invention); B65D17/00 (Core/Invention)

CPC: B65D17/163 B65D17/165 B65D2517/0016 B65D2517/0079

European class: B65D17/16B1 B65D17/16B2 L65D517/00Y2D L65D517/00Y7C3

US class: 1/1 220/270

Classification Explorer

Cited documents: WO08098761 A1, WO07039367, WO06112765, WO03104092 A1, WO0208074, WO0128875, USD579771 S1, USD568741 S1, USD565406 S1, USD520358 S1, USD432015 S1, USD421907 S1, USD382481 S1, USD352898 S1, USD332402 S1, USD321326 S1, USD312404 S1, USD307720 S1, USD278980 S1, USD263803 S1, USD243833 S1, USD226073 S1, USD226071 S1, USD224209 S1, USD221930 S1, USD219370 S1, USD200021 S1, US8104319 BB, US7909196 BB, US7617945 BB, US7500376 BB, US7407061 BB, US7341163 BB, US7305861 BB, US7174762 BB, US7168586 BB, US6723360 BA, US6702538 BA, US6575684 BB, US6427861 BA, US6290447 BA, US6206220 BA, US6202881 BA, US6138856 A, US6105806 A, US6089072 A, US6059137 A, US6024239 A, US601787 A, US5947317 A, US5813561 A, US5804237 A, US5749257 A, US5743445 A, US5730314 A, US5685189 A, US5671860 A, US5622273 A, US5593063 A, US5581978 A, US5502995 A, US5335808 A, US5307947 A, US5199618 A, US5169017 A, US5069356 A, US5064087 A, US5011037 A, US4836398 A, US4747511 A, US4722215 A, US4716755 A, US4701090 A, US4680917 A, US4674649 A, US4571978 A, US4559729 A, US4557398 A, US4524879 A, US4503989 A, US4463866 A, US4458469 A, US4442950 A, US4397400 A, US4369888 A, US4363419 A, US4361244 A, US4333581 A, US4266688 A, US4252247 A, US4205760 A, US4150777 A, US4030631 A, US4015744 A, US3986633 A, US3967752 A, US3952911 A, US3951299 A, US3950592 A, US3941277 A, US3938696 A, US3930592 A, US3929251 A, US3905513 A, US3863801 A, US3839843 A, US3838788 A, US3779417 A, US3762596 A, US3744662 A, US3724709 A, US3704140 A, US3703979 A, US3674171 A, US3662916 A, US3650387 A, US3643833 A, US3559843 A, US3477608 A, US3404801 A, US3401821 A, US3400853 A, US3369689 A, US3221924 A, US3160302 A, US3152711 A, US2971671 A, US2759307 A, US2261117 A, US2124959 A, US2054066 A, US2010287886 AA, US2010116374 AA, US2010021270 AA, US2008314906 AA, US2008197132 AA, US2008110888 AA, US2008078764 AA, US2007278230 AA, US2007215620 AA, US2007108209 AA, US2007068943 AA, US2006060582 AA, US2005263481 AA, US2005224497 AA, US2005210835 AA, US2005150889 AA, US2004259235 AA, US2003110736 AA, US2002113069 AA, US2002104842 AA, US1570732 A, RU2283265 C2, NL7416818, KR200017742, JP7031623 U1, JP61048128, JP4044950, JP2004182256 A2, JP2004091015 A2, JP2003112735, JP2003054549, JP2002160733, JP2000128168 A2, JP1182247, GB2320008 A1, GB1533959, GB1316484, FR2826939, EP1958882 A1, EP1919786, EP1577222, EP0088185, DE2540362,

Forward Citations: WO11058138, USD711228, US9376233, US8733576, US8454292, US2015144633, US2015129595, US2012279967, KR101747986, JP2013510776, JP2012526713, EP2322440, CN102712387, CN102712387, AU2010317963,

Abstract:
Source: US2011186575A This invention relates to a can end (1) providing improved tab access for a consumer. A further aspect of the present invention relates to a container incorporating such a can end (1). The can end (1) includes a moveable portion (30) located beneath all or part of the handle (20b) of the can end, with the moveable portion deformable from an ‘up’ position (30a) to a ‘down’ position (30b) to provide increased tab access for a consumer. The can end (1) is provided with one or more downwardly inclined annular steps (31), which has been found to greatly increase the force required to deform the panel from the ‘down’ to the ‘up’ position, therefore resulting in a far greater likelihood of the consumer receiving a container (40) incorporating the can end (1) with the moveable portion (30) in the ‘down’ position (30b), thereby facilitating tab access.

0) US2009039090A – CAN END WITH REINFORCING BEAD

11) Family number: 42940424 (US2009039090A) © PatBase

Title: CAN END WITH REINFORCING BEAD

Priority: EP20080797460 20080808 US20070837175 20070810 WO2008US72593 20080808 US20150641646 20150309

Family:

Publication number	Publication date	Application number	Application date
AU2008287051 AA	20090219	AU20080287051	20080808
AU2008287051 BB	20111208	AU20080287051	20080808
AU2008287051 BI	20120202	AU20080287051	20080808
BRPI0816204 A2	20150414	BR2008PI16204	20080808
CA2699193 AA	20090219	CA20082699193	20080808
CA2699193 C	20131029	CA20082699193	20080808
DE602008024120 D1	20130620	DE200860024120T	20080808
EP2197754 A1	20100623	EP20080797460	20080808
EP2197754 B1	20130424	EP20080797460	20080808
ES2421566 T3	20130903	ES20080797460T	20080808
KR101179303 B1	20120903	KR20107005332	20080808
KR20100055457 A	20100526	KR20107005332	20080808
RU2437811 C2	20111227	RU20100108990	20080808
TR201003276 T1	20101122	TR20100003276T	20080808
US2009039090 AA	20090212	US20070837175	20070810
US2015175296 AA	20150625	US20150641646	20150309
US8973780 BB	20150310	US20070837175	20070810
US9540137 BB	20170110	US20150641646	20150309
WO09023554 A1	20090219	WO2008US72593	20080808
WO09023554 A9	20090409	WO2008US72593	20080808

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** FORREST RANDALL G ; REKSAM BEVERIDZH KEHN KOMPANI ; TURNER TIMOTHY L ; REXAM BEVERAGE CAN CO

Assignee(s): REXAM BEVERAGE CAN CO CHICAGO ; REXAM BEVERAGE CAN COMPANY

Inventor(s):(std)**:** FORREST RANDALL ; FORREST RANDALL G ; FORREST REHNDEHLL DZH ; TURNER TIMOTHY L ; TURNER TIMOTHY ; TERNER TIMOTI L

Inventor(s): TURNER TIMOTHY L PORT CHARLOTTE ; RANDALL G FORREST ; TIMOTHY L TURNER ; TIMOTHY TURNER ; FORREST RANDALL G PARK RIDGE ; RANDALL FORREST

Agent(s): CULLENS PATENT AND TRADE MARK ATTORNEYS; CULLENS PTY LTD; SMART AND BIGGAR; VOSSIUS AND PARTNER PATENTANWAELTE RECHTSANWAELTE MBB; LANE CATHAL MICHAEL; CARPINTERO MARIO; UNGARETTI AND HARRIS LLP,INTELLECTUAL PROPERTY GROUP – PATENTS; UNGARETTI AND HARRIS LLP; PETER M; GREER BURNS AND CRAIN LTD; KLOBUCHAR PETER M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/34 B65D6/34 B65D6/40 B65D8/00 B65D8/04 B65D8/08 B65D8/12 (Advanced/Invention);
B65D8/04 B65D8/08 B65D8/12 (Advanced/Non–invention);
B65D8/00 B65D8/04 (Core/Invention)

CPC: B65D7/40 B65D17/161 B65D2517/0014 B65D2517/0062 B65D2517/0089

European class: B65D17/16B L65D517/00Y2C L65D517/00Y7A1A L65D517/00Y7Z

US class: 220/619 220/623 220/624

Classification Explorer

Cited documents: WO9834743 A1, WO9637414 A1, WO07005564 A2, WO05113352 A1, WO05113351 A1, WO03059764 A1, WO03016155 A1, WO0243895 A1, WO02068281 A1, WO02057148 A1, WO02057137 A2, WO0200512 A1, WO0141948 A2, US7278548 BB, US7174762 BB, US7036348 BB, US7004345 BB, US6935826 BB, US6889862 BB, US6877941 BB, US6848875 BB, US6772900 BB, US6736283 BA, US6702142 BB, US6561004 BA, US6516968 BB, US6499622 BA, US6460723 BB, US6419110 BA, US6330954 BA, US6280433 BA, US6234337 BA, US6234337, US6089072 A, US6065634 A, US6024239 A, US5964366 A, US5950858 A, US5823730 A, US5538744 A, US5346087 A, US5174706 A, US5149238 A, US5143504 A, US5105977 A, US5069355 A, US4991735 A, US4832223 A, US4804106 A, US4722215 A, US4704887 A, US4685849 A, US4680917 A, US4641761 A, US4577774 A, US4571978 A, US4448322 A, US4434641 A, US4386713 A, US4324343 A, US4262815 A, US4217843 A, US4116361 A, US4093102 A, US4084721 A, US4055134 A, US4031837 A, US3990376 A, US3945334 A, US3941277 A, US3905513 A, US3871314 A, US3868919 A, US3853080 A, US3837524 A, US3765352 A, US3705563 A, US3525455 A, US3434623 A, US3186583 A, US2010030161 AA, US2008108972 AA, US2006096994 AA, US2006071005 AA, US2005252922 AA, US2005247717 AA, US2005115976 AA, US2005029269 AA, US2005006395 AA, US2005006388 AA, US2004238546 AA, US2004211780 AA, US2004206764 AA, US2004200838 AA, US2004140312 AA, US2004074911 AA, US2004065663 AA, US2003173367 AA, US2003121924 AA, US2003042258 AA, US2002158071 AA, US2002088500 AA, US2002050493 AA, US2001037668 AA, NL1013957 C2, JP2006069570 A2, JP2006069570, JP2005515120 T2, JP2001151232 A2, GB422052 A, DE8228681 U, DE8228681, DE2554264 A1, DE2303943 A1, AU107340 A1, AU107340 A1,

Forward Citations: WO13057250, USD762114, USD750488, USD749415, USD731887, USD727725, USD715647, USD715144, US9468964, US9446879, US9403628, US9233784, US9162795,

Abstract:
Source: US2009039090A A can end for a two−piece beverage can is described. The can end has a center panel positioned about a vertical center axis. The center panel has a means for opening the can end located on a public side. A circumferential strengthening member is located about the center panel. A wall extends upwardly from the circumferential strengthening member. A curl is joined to an upper end of the wall. The curl defines an outer perimeter of the can end. A reinforcing bead is located on the wall between an uppermost portion of the wall and a lowermost portion of the wall.

0) US2002134788A – METALLIC BEVERAGE CAN END

12) Family number: 28276203 (US2002134788A) © PatBase

Title: METALLIC BEVERAGE CAN END

Priority: EP20020703222 20020121 US20010262829P 20010119 US20010264568P 20010126 US20010860740 20010518 US20020053749 20020118 WO2002US01953 20020118 WO2002US02047 20020121

Family:

Publication number	Publication date	Application number	Application date
AT525298 E	20111015	AT20020703222T	20020121
AU2002236856 AA	20020730	AU20020236856	20020121
AU2002236856 BB	20060928	AU20020236856	20020121
AU2002237925 AA	20020730	AU20020237925	20020118
BRPI0207069 A	20050111	BR2002PI07069	20020121
BRPI0207069 B1	20120612	BR2002PI07069	20020121
CN1214949 C	20050817	CN20028006050	20020121
CN1494504 A	20040505	CN20028006050	20020121
DE60241088 D1	20111124	DE20026041088	20020121
EP1373079 A1	20040102	EP20020703222	20020121
EP1373079 A4	20090805	EP20020703222	20020121
EP1373079 B1	20110921	EP20020703222	20020121
ES2373542 T3	20120206	ES20020703222T	20020121
JP2004524226 T2	20040812	JP20020557838T	20020121
MXPA03006735 A1	20040531	MX2003PA06735	20020121
PL202554 B1	20090731	PL20020364283	20020121
PL364283 A1	20041213	PL20020364283	20020121
RU2003126232 A	20041027	RU20030126232	20020121
RU2299843 C2	20070527	RU20030126232	20020121
US2002134788 AA	20020926	US20010860740	20010518
US2002139805 AA	20021003	US20020053749	20020118
US6460723 BB	20021008	US20010860740	20010518
WO02057137 A2	20020725	WO2002US01953	20020118
WO02057137 A3	20030313	WO2002US01953	20020118
WO02057148 A1	20020725	WO2002US02047	20020121
WO02057148 C2	20040916	WO2002US02047	20020121
YU59903 A	20041125	YU20030000599	20020121

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP ; BATHURST JESS N ; BOL CORP ; CHASTEEN HOWARD C ; NGUYEN TUAN A ; RAYBURN ROBERT M ; SCOTT DANA H

Assignee(s): BOL KORPOREJSHN ; BALL 10 LONGS PEAK DRI CORPVEB ; BALL BROOMFIELD CORP

Inventor(s):(std)**:** BATURST DZHESS ; CHASTEEN HOWARD C ; JESS N BATHURST ; NGUIEN TUAN ; NGUYEN TUAN ; NGUYEN TUAN A ; BATHURST JESS ; BATHURST JESS N ; RAYBURN ROBERT M ; SCOTT DANA H ; TUAN A NGUYEN

Inventor(s): TUAN NGUYEN ; ROBERT M RAYBURN ; BATHURST JESS N FORT COLLINS ; NGUYEN TUAN A GOLDEN ; DANA H SCOTT ; HOWARD C CHASTEEN

Agent(s): PHILLIPS ORMONDE FITZPATRICK; ISARPATENT PATENTANWAELTE BEHNISCH BARTH CHARLES HASSA PECKMANN AND PARTNER MBB; PRATO ROBERTO

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK

ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW

International class (IPC 8–9): B21D51/14 B21D51/38 B21D51/44 B65D6/28 B65D8/04 B65D8/12 B65D8/20 (Advanced/Invention); B21D51/00 B21D51/38 B65D6/00 B65D8/04 (Core/Invention)

International class (IPC 1–7): B05D6/28 B21D51/14 B21D51/44 B65B B65D6/28 B65D8/02 B65D8/04 B65D8/06

CPC: B21D51/38 B65D17/06

European class: B21D51/38 B65D17/06

US class: 220/619 220/623 220/624

Classification Explorer

Cited documents: WO9834743 A1, USD406236 S1, USD356498 S1, USD337521 S1, USD304302 S1, USD300607 S1, USD281581 S1, USD279265 S1, USD229396 S1, USD206500 S1, US6499622 BA, US6131761 A, US6102243 A, US6065634 A, US5950858 A, US5685189 A, US5582319 A, US5356256 A, US5145086 A, US5046637 A, US4991735 A, US4928844 A, US4809861 A, US4735863 A, US4713958 A, US4641761 A, US4606472 A, US4580692 A, US4467933 A, US4448322 A, US4402419 A, US4127212 A, US4093102 A, US4030631 A, US4015744 A, US3982657 A, US3843014 A, US3836038 A, US3774801 A, US3744667 A, US3734338 A, US3480175 A, US3268105 A, US3251515 A, US3176872 A, US2894844 A, GB2315478 A1, GB2218024 A1, EP0153115 A2,

Forward Citations: WO12039433, WO07085499, WO07005564, WO05032953, WO03059764, USD787952, USD698668, USD695611, USD685266, USD672235, USD658980, USD640141, USD559680, US9637269, US9566634, US9550604, US9540137, US9499299, US9371152, US9272819, US9260217, US8998027, US8978915, US8973780, US8939695, US8931660, US8875936, US8851323, US8844761, US8783495, US8727169, US8708188, US8534490, US8505765, US8496132, US8490825, US8328492, US8313004, US8235244, US8205477, US8157119, US8104319, US8052005, US8011527, US7938290, US7909196, US7819275, US7748563, US7743635, US7673768, US7644833, US7591392, US7556168, US7506779, US7500376, US7380684, US7350392, US7341163, US7174762, US7108469, US7108469, US7100789, US7004345, US6915553, US6877607, US6772900, US6761280, US6736283, US2012205378, US2011100854, US2010059530, US2010044383, US2009039091, US2008257900, US2005252922, US2005252917, US2005115976, US2005082299, US2005029269, US2005006395, US2004211786, US2004159697, US2004094559, US2004074911, US2003126731, US2003121924, JP2010215274, JP2009513443, JP2004533933, EP2640534, EP2497717, EP2392421, EP1813540, EP1583622, EP1583622, EA019950, CN104024116, AP2807,

Abstract:
Source: US2002134788A The present invention describes a beverage can end which utilizes less material and has an improved internal buckle strength based on the geometric configuration of an upper and lower chuck wall, inner panel wall and central panel, and having a unit depth to an outwardly concave countersink of at least about 0.215 inches.

0) US2014054290A – ROTATING TAB

13) Family number: 55882399 (US2014054290A) © PatBase

Title: ROTATING TAB

Priority: US20120692758P 20120824 US20130974265 20130823 US20140519575 20141021 WO2013US56326 20130823

Family:

Publication number	Publication date	Application number	Application date
CN104703886 A	20150610	CN201380049522	20130823
CN104703886 B	20170609	CN201380049522	20130823
EP2888173 A2	20150701	EP20130830693	20130823
EP2888173 A4	20160323	EP20130830693	20130823
JP2015526354 T2	20150910	JP20150528674T	20130823
US2014054290 AA	20140227	US20130974265	20130823
US2015053681 AA	20150226	US20140519575	20141021
US8893913 BB	20141125	US20130974265	20130823
US9102451 BB	20150811	US20140519575	20141021
WO14031926 A2	20140227	WO2013US56326	20130823
WO14031926 A3	20140424	WO2013US56326	20130823

Probable Assignee: STOLLE MACHINERY CO LLC

Assignee(s):(std)**:** STOLLE MACHINERY CO LLC

Inventor(s):(std)**:** MCCLUNG JAMES A ; DAVIDSON JASON A ; CARSTENS AARON E ; BUTCHER GREGORY H

Agent(s): PARRY SIMON JAMES; MARUYAMA AND CO; ECKERT SEAMANS CHERIN AND MELLOTT LLC; GRANT E; COFFIELD GRANT E ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/28 B65D17/34 B65D17/36 B65D51/16 (Advanced/Invention); B65D17/00 (Advanced/Non–invention)

CPC: B65D2517/0092 B65D51/1677 B65D17/165 B65D2517/0014

US class: 1/1 220/269 220/270 220/271 220/272 413/17

Classification Explorer

Cited documents: WO9527661 A1, WO12018549 A1, WO08023983 A1, US5456378 A, US5397014 A, US5285919 A, US5131555 A, US5011037 A, US3856184 A, US2856184 A, US2012199587 AA, US2012031056 AA, US2011266281 AA, US2011056946 AA, US2010294771 AA, US2008011786 AA, NL1023297 C1, NL1023297 A, EP2038178 B1, CN101821168 A,

Forward Citations: USD762114, USD750488, USD749415, USD731887, USD727725, USD715647, USD715144, US9446879, US9403628, US9271978, US9233784, US9162795,

Abstract:
Source: US2014054290A A rotating tab is provided. The tab includes a body having a first end and a second end disposed opposite and distal from the first end, a nose portion located at or about the first end of the tab, a lift portion located at or about the second end of the tab, and a rivet receiving portion disposed proximate the nose portion. The rivet receiving portion includes a rivet hole. A rivet extends through the rivet hole and is staked to fasten the rivet receiving portion of the tab to a can end. The body of the tab is structured to be rotated about the rivet to align a portion of the tab with a secondary scoreline in the can end. A portion of the tab is structured to be depressed to sever the secondary scoreline to vent the can end.

0) US2011297679A – CAN END PRODUCED FROM DOWNGAUGED BLANK

14) Family number: 50072330 (US2011297679A) © PatBase

Title: CAN END PRODUCED FROM DOWNGAUGED BLANK

Priority: US20100795434 20100607 US20170417830 20170127 WO2011US39459 20110607

Family:

Publication number	Publication date	Application number	Application date
BR112012031227 A2	20161025	BR20121131227	20110607
EP2576367 A1	20130410	EP20110726288	20110607
RU2012155151 A	20140720	RU20120155151	20110607
RU2572770 C2	20160120	RU20120155151	20110607
US2011297679 AA	20111208	US20100795434	20100607
US2017137169 AA	20170518	US20170417830	20170127
US9566634 BB	20170214	US20100795434	20100607
WO11156386 A1	20111215	WO2011US39459	20110607

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** FORREST RANDALL G ; GOGOLA MICHAEL R ; REKSAM BEVERIDZH KEHN KOMPANI ; REXAM BEVERAGE CAN CO

Assignee(s): REXAM BEVERAGE CAN COMPANY

Inventor(s):(std)**:** FORREST RANDALL ; FORREST RANDALL G ; FORREST REHNDEHLL DZH ; GOGOLA MAJKL R ; GOGOLA MICHAEL R

Inventor(s): RANDALL FORREST ; MICHAEL R GOGOLA

Agent(s): LANE CATHAL MICHAEL; GREER BURNS AND CRAIN LTD; KLOBUCHAR PETER M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D22/24 B21D51/38 B21D51/44 B65D17/00 B65D17/34 B65D51/18 (Advanced/Invention)

CPC: B21D22/24 B21D51/383 B65D2517/0014 B65D2517/0062 B65D17/165 B21D51/44

European class: B65D17/16B2 L65D517/00Y2C L65D517/00Y7A1A

US class: 220/254.1 220/254.100P 413/8 413/8S

Classification Explorer

Cited documents: WO9901351 A2, WO9834743 A1, WO9637414 A1, WO07005564 A2, WO05113352 A1, WO03053800 A1, WO0141948 A2, USRE33217 E, US7591392 BB, US7370774 BB, US7341163 BB, US6748789 BB, US6736283 BA, US6516968 BB, US6499622 BA, US6460723 BB, US6419110 BA, US6234336 BA, US6126034 A, US6065634 A, US6024239 A, US5987956 A, US5527143 A, US5502995 A, US5356256 A, US5331836 A, US5149238 A, US5062287 A, US5046637 A, US4991735 A, US4977772 A, US4928844 A, US4865506 A, US4862722 A, US4832223 A, US4809861 A, US4808052 A, US4796772 A, US4790705 A, US4735863 A, US4722215 A, US4716755 A, US4713958 A, US4704887 A, US4685849 A, US4648528 A, US4641761 A, US4606472 A, US4587825 A, US4577774 A, US4571978 A, US4567746 A, US4561280 A, US4559801 A, US4467933 A, US4448322 A, US4434641 A, US4372720 A, US4217843 A, US4109599 A, US4093102 A, US4084721 A, US4031837 A, US3843014 A, US3774801 A, US3537291 A, US2010044383 AA, US2007029324 AA, US2005029269 AA, US2004074911 AA, US2003121924 AA, US2003121920 AA, US2003010785 AA, RU2361693 C1, RU2344056 C2, RU2278062 C2, RU2006142348, GB2193140 A1, GB2067159 A1, GB1604068 A, EP1306310 A2, EP0828663 B1, EP0497346 B1, EP0497346 A1, EP0153115 A2, EP0149823 A2, EP0149185 A2, EP0103074 A2,

Forward Citations: WO17023846, USD762114, USD750488, USD749415, USD727725, USD715144, US9580203, US9446879, US9233784, US9114451, US9033175,

Abstract:
Source: US2011297679A A can end for a two−piece beverage container has a curl positioned about a longitudinal axis which defines an outer perimeter of the can end. A circumferential wall angles downwardly and radially inwardly relative to a radially inner portion of the curl. A strengthening member extends radially inwardly relative to the circumferential wall. A center panel extends radially outwardly from the longitudinal axis towards the strengthening member and has a diameter greater than 87.7 percent of an overall diameter of the can end. A frangible score and a hinge portion define an openable tear panel in the center panel. A stay−on tab is attached to the center panel and has a nose portion overlying the tear panel opposite a lift end of the tab.

0) US2016000246A – INTERMEDIATE ELEMENT FOR RECLOSING CAN

15) Family number: 57225004 (US2016000246A) © PatBase

Title: INTERMEDIATE ELEMENT FOR RECLOSING CAN

Priority: EP20130197169 20131213 EP20140707105 20140212 US20130763623P 20130212 WO2014EP52761 20140212 US20140766357 20140212

Family:

Publication number	Publication date	Application number	Application date
AU2014217976 AA	20140821	AU20140217976	20140212
CA2900884 AA	20150811	CA20142900884	20140212
EP2956375 A1	20151223	EP20140707105	20140212
EP2956375 B1	20170322	EP20140707105	20140212
HK1218286 A1	20170210	HK20160106197	20160531
JP2016510292 T2	20160407	JP20150557418T	20140212
KR20150119076 A	20151023	KR20157024601	20140212
MX2015010373 A1	20160404	MX20150010373	20140212
SG11201506170Y A1	20150929	SG20151106170	20140212
US2016000246 AA	20160107	US20140766357	20140212
WO14124992 A1	20140821	WO2014EP52761	20140212
ZA201506344 A	20161130	ZA20150006344	20150828

Probable Assignee: EVDS BVBA

Assignee(s):(std)**:** E V D S BVBA

Assignee(s): EVDS BVBA ; VANDERSTRAETEN ERWIN

Inventor(s):(std)**:** VANDERSTRAETEN ERWIN

Inventor(s): ERWIN VANDERSTRAETEN

Agent(s): SPRUSON AND FERGUSON; SMART AND BIGGAR; IPLODGE BVBA; FUKAMI PATENT OFFICE PC

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A47G19/22 B65D B65D17/00 B65D17/50 B65D81/20 B65D81/34 (Advanced/Invention); B65D (Subclass/Invention)

CPC: B65D2517/0004 B65D2517/0046 B65D2517/0002 A47G19/2272 B65D17/166 B65D81/2053

US class: 220/270 220/714 29/428

Classification Explorer

Cited documents: WO12049280 A1, WO12028694 A1, WO10094793 A2, WO05056400 A1, US8336726 BB, US5810189 A, US4609123 A, US4190174 A, AT507950 A1,

Forward Citations: WO17032752, WO16139274, WO16138933, EP3133024,

Abstract:
Source: US2016000246A An intermediate element for a metal beverage can, for carbonated drinks, where the intermediate element has a shut–off valve and is to be attached to the can end of the can shielding the can end from the interior of the can.

0) US2010294768A – RESEALABLE BEVERAGE CAN ENDS

16) Family number: 47677293 (US2010294768A) © PatBase

Title: RESEALABLE BEVERAGE CAN ENDS

Priority: EP20090163318 20090619 EP20100719213 20100514 US20090470909 20090522 WO2010US34829 20100514

Family:

Publication number	Publication date	Application number	Application date
EP2263945 A1	20101222	EP20090163318	20090619
EP2432704 A1	20120328	EP20100719213	20100514
EP2432704 B1	20161214	EP20100719213	20100514
SA3340 B1	20140316	SA20100310384	20100515
US2010294768 AA	20101125	US20090470909	20090522
US8833585 BB	20140916	US20090470909	20090522
WO10135166 A1	20101125	WO2010US34829	20100514

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** COMBE FLORIAN CHRISTIAN GREGORY ; CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC ; RAMSEY CHRISTOPHER PAUL ; SANT ANDREW JONATHAN ; FARROW SYLVIA MARIA ; HORTON PHILIP NORMAN ; GOSSEDGE GRAHAM MARTIN

Assignee(s): DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS

Inventor(s):(std)**:** CHRISTIAN FLORIAN ; COMBE FLORIAN CHRISTIAN GREGORY ; FARROW SYLVIA MARIA ; GOSSEDGE GRAHAM MARTIN ; HORTON PHILIP NORMAN ; MARIA SYLVIA ; MARTIN GRAHAM ; NORMAN PHILIP ; RAMSEY CHRISTOPHER PAUL ; SANT ANDREW JONATHAN ; SANT ANDRREW JONATHAN

Inventor(s): THE DESIGNATION OF THE INVENTOR HAS NOT YET...

Agent(s): SMITH DEBRA JANE CLARE; LIND ROBERT; WOODCOCK WASHBURN LLP; BAKER AND HOSTETLER LLP; FULLMER HAROLD H ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/34 B65D17/50 B65D51/18 B65D51/22 B65D53/00 (Advanced/Invention)

CPC: B65D17/166 B65D2517/0031

European class: B65D17/16B2B L65D517/00Y5

US class: 220/240 220/254.3 220/254.9 220/255.1 220/255.100S 220/259.1 220/269 220/269S 220/811 220/811S 220/833 220/833S 220/849 220/849S

Classification Explorer

Cited documents: WO9836987, WO9609968, WO9504709 A1, WO9110600 A1, WO09062004 A1, WO08068169, WO08054636, WO07128810 A1, WO07039367 A1, WO03062084, WO0200512, WO0128875 A1, US8272532 BB, US8240498 BB, US7921538 BB, US7677404 BB, US7198168 BB, US7168586 BB, US7152766 BA, US6763963 BA, US6626314 BA, US6588617 BA, US6581264 BB, US6105806 A, US6065634 A, US5947317 A, US5851685 A, US5829610 A, US5813561 A, US5711447 A, US5692633 A, US5622273 A, US5351853 A, US5335808 A, US5242073 A, US5199618 A, US5199591 A, US5148935 A, US5085338 A, US4951835 A, US4930654 A, US4915290 A, US4821912 A, US4783985 A, US4746032 A, US4681238 A, US4576306 A, US4540611 A, US4462504 A, US4440310 A, US4431110 A, US4407423 A, US4397403 A, US4397400 A, US4386713 A, US4369888 A, US4361244 A, US4266688 A, US4150777 A, US4136797 A, US4127221 A, US4122970 A, US4098439 A, US4054205 A, US3952911 A, US3910410 A, US3871544 A, US3871314 A, US3788512 A, US3744662 A, US3741141 A, US3705670 A, US3622034 A, US3520440 A, US3450301 A, US3447713 A, US3406867 A, US3386613 A, US3287053 A, US3269168 A,

US3262612 A, US3250425 A, US3190410 A, US26715908, US2009179033 AA, US2009173737 AA, US2009001081 AA, US2008314904 AA, US2008110887 AA, US2008053997 AA, US2007262079 AA, US2007215620 AA, US2007164026 AA, US2007145055 AA, US2007068943 AA, US2006163253 AA, US2005173453 AA, US2005150889 AA, US2005115977 AA, US2005051553 AA, US2003178433 AA, US2003062370 AA, US2002050493 AA, NL2000994 C2, NL2000219 C2, KR20010017742 A, KR200017742 A, JP61048128 A2, JP2003112735 A2, JP2003054549 A2, GB2320008 A1, GB2154561 A1, FR1434827 A, EP1767464 A1, EP0828663 B1, EP0305598 A1, EP0088185 A1,

Forward Citations: WO15148242, WO13079730, US9637269, US9272819, US8985371, US8931656, US8844761, US2012012586,

Abstract:
Source: US2010294768A A can end combination, a resealable beverage can, and a method of sealing a beverage can are disclosed. The can end combination may include a metal can end and a resealable closure coupled to the can end. The can end may include a center panel having an aperture formed therethrough. The closure may include a base plate and a top plate coupled to the base plate. The closure may have a sealed position in which the base plate contacts the center panel about the aperture to form at least one of a bore seal and a face seal. The closure may also have an intermediate position in which the base plate is proximate the aperture but the closure is devoid of the bore seal and the face seal. The closure may also have a fully open position in which the aperture is exposed to enable pouring liquid through the aperture.

0) US2008127705A – METHOD AND APPARATUS FOR MAKING TWO–PIECE BEVER...

17) Family number: 41861115 (US2008127705A) © PatBase

Title: METHOD AND APPARATUS FOR MAKING TWO–PIECE BEVERAGE CAN COMPONENTS

Priority: EP20070854860 20071130 US20060607468 20061130 WO2007US86048 20071130

Family:

Publication number	Publication date	Application number	Application date
DE602007029897 D1	20130613	DE200760029897T	20071130
EP2091676 A1	20090826	EP20070854860	20071130
EP2091676 B1	20130417	EP20070854860	20071130
ES2421628 T3	20130904	ES20070854860T	20071130
US2008127705 AA	20080605	US20060607468	20061130
US7797978 BB	20100921	US20060607468	20061130
WO08067522 A1	20080605	WO2007US86048	20071130

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** GILET PIERRE YVES ; KELLY SHAUN ; REXAM BEVERAGE CAN CO ; REXAM BEVERAGE CAN EUROP LTD ; REXAM BEVERAGE CAN EUROPE LTD ; SASSO JOSEPH A JR ; SASSO JOSEPH A

Assignee(s): REXAM BEVERAGE CAN EUROPE LIMITED ; REXAM BEVERAGE CAN EUROPE LTD LUTON ; REXAM BEVERAGE CAN CO CHICAGO ; REXAM BEVERAGE CAN COMPANY

Inventor(s):(std)**:** GILET PIERRE YVES ; KELLY SHAUN ; SASSO JOSEPH A ; SASSO JOSEPH A JR ; SASSO JR JOSEPH A

Inventor(s): SASSO JOSEPH A JR ROCKFORD

Agent(s): KILBURN AND STRODE LLP; HICKINSON KATIE LOUISE; CAWLEY AIMEE ELIZABETH; CARPINTERO MARIO; IP DEPARTMENT, SCHWARTZ COOPER CHARTERED; IP DEPARTMENT SCHWARTZ COOPER CHARTERED; UNGARETTI AND HARRIS LLP; KLOBUCHAR PETER M

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D11/10 B21D51/26 (Advanced/Invention); B21D11/00 B21D51/26 (Core/Invention)

CPC: Y10S72/715 B21D51/2692

European class: B21D51/26T

US class: 72/379.4 72/379.6 72/405.01 72/419 72/715 723/794

Classification Explorer

Cited documents: WO07020946 A1, US7108469 BB, US6945085 BA, US6802197 BB, US6463776 BA, US6349586 BA, US5626049 A, US5611454 A, US5572893 A, US5377518 A, US5301534 A, US5119657 A, US5095730 A, US4655677 A, US4567746 A, US4546873 A, US4454743 A, US4342404 A, US4213324 A, US4199073 A, US3990353 A, US3545631 A, US3029507 A, US2789344 A, US2350491 A, US2099449 A, US2088223 A, US2080399 A, US2005138984 AA, US1702278 A, US1492230 A, JP8257661 A2, JP2007045507 A2, JP2000015371 A2, EP1136154 A1,

Forward Citations: US9016101, US2016354831, US2010251798, EP2353745, DE102010000094, DE102010000094, AU2010235077,

Abstract:
Source: US2008127705A A method of forming two–piece beverage can components is described. The method requires providing a plurality of pre–punched metallic disks. A disk feeder transfers at least one of the plurality of pre–punched metallic disks to a first process station in a plurality of processing stations. The first disk is deformed

during a two−piece beverage can component manufacturing process is performed at the first station. The deformed disk is removed from the first station and transferred to each subsequent processing station in the plurality of processing stations. Further two−piece beverage can component manufacturing processes are performed in each subsequent processing station to produce a substantially finished two−piece beverage can component.

18) Family number: 15932830 (US5715964A) © PatBase

Title: CAN END WITH EMBOSS AND DEBOSS SCORE PANEL STIFFENING BEADS

Priority: US19960593035 19960223 US19980019920 19980206 US19990378066 19990820 WO1997US02801 19970221

Family:

Publication number	Publication date	Application number	Application date
AR005988 AA	19990721	AR1997P100748	19970225
AT222872 E	20020915	AT19970907790T	19970221
AU199719698 A1	19970910	AU19970019698	19970221
BRPI9707662 A	20000104	BR1997PI07662	19970221
DE69715017 D1	20021002	DE19976015017	19970221
DE69715017 T2	20030403	DE19976015017T	19970221
EP0929450 A1	19990721	EP19970907790	19970221
EP0929450 B1	20020828	EP19970907790	19970221
ES2184993 T3	20030416	ES19970907790T	19970221
IN00551DE1997 A	20071123	IN1997DE00551	19970304
IN220798 B	20080725	IN1997DE00551	19970304
US5715964 A	19980210	US19960593035	19960223
US6330954 BA	20011218	US19990378066	19990820
WO9730902 A1	19970828	WO1997US02801	19970221

Probable Assignee: REXAM BEVERAGE CAN COMPANY

Assignee(s):(std): COORS BREWING CO ; AMERICAN NATIONAL CAN CO ; REXAM BEVERAGE CAN CO

Assignee(s): REXAM BEVERAGE CAN COMPANY ; REXAM BEVERAGE CAN CO CHICAGO ; AMERICAN NATIONAL CAN COMPANY ; COORS BREWING CO GOLDEN ; COORS BREWING COMPANY ; COORS GLOBAL PROPERTIES INC ; MILLERCOORS LLC

Inventor(s):(std): HURST L ; HURST ROBERT L ; TURNER L ; TURNER TIM L

Inventor(s): TIM L TURNER ; ROBERT L HURST

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CN CU CZ DE DK EE ES FI FR GB GE GR HU IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG UZ VN

International class (IPC 8–9): B65D1/14 B65D1/40 B65D17/32 B65D17/34 (Advanced/Invention)

International class (IPC 1–7): B65D17/32 B65D17/34

CPC: Y10S220/906 B65D17/165

European class: B65D17/16B2

US class: 220/269 220/906

Classification Explorer

Cited documents: USRE31702 E, USD371073 S1, USD364807 S1, USD275373 S1, USD267393 S1, USD265463 S1, USD262517 S1, USD250933 S1, USD246229 S1, US5749488 A, US5715964 A, US5711448 A, US5653355 A, US5456378 A, US5385254 A, US5375729 A, US5129541 A, US5064087 A, US4939665 A, US4804104 A, US4733793 A, US4524879 A, US4465204 A, US4463866 A, US4363419 A, US4318489 A, US4313545 A, US4266685 A, US4210257 A, US4205760 A, US4184607 A, US4175670 A, US4148410 A, US4084721 A, US3967752 A, US3941277 A, US3900128 A, US3424337 A, US3291336 A, US3259265 A, EP0704382 A2, EP0564725 A1,

Forward Citations: WO17027802, WO13020706, WO12112487, WO12010258, WO02051710, USRE42485, USD762114, USD750488, USD749415, USD727725, USD715144, USD507485,

USD476889, USD448666, USD434983, US9637269, US9573724, US9540137, US9446879, US9272819, US9248936, US9233784, US8973780, US8783495, US8627979, US8196767, US7909196, US7757887, US7735673, US7594585, US7165696, US7000797, US6761281, US6761280, US6736283, US6729495, US6575684, US6425493, US6405889, US6341709, US6330954, US6244456, US6164480, US6161717, US6024239, US5964366, US5947317, US5875911, US2014263328, US2012228296, US2012205378, US2011147382, US2010276423, US2010065568, US2007284374, US2007023441, US2006270848, US2005252917, US2004206764, US2003080132, JP2009126523, EP2557050, EP2502838, EP2409925, EP1353852, EP1135300, AU762618,

Abstract:
Source: US5715964A A can end for a two−piece beverage can including a generally flat radially extending portion; a score panel defined in the generally flat radially extending portion by an arcuate score, the score panel having a central, longitudinal axis projecting in a first axial direction and a second axial direction opposite the first direction; an annular emboss bead formed in the score panel and projecting in a first axial direction; and an annular deboss bead formed in the score panel and projecting in the second axial direction.

0) US2015239607A – BEVERAGE CAN ENDS SUITABLE FOR SMALL DIAMETERS ...

19) Family number: 56200926 (US2015239607A) © PatBase

Title: BEVERAGE CAN ENDS SUITABLE FOR SMALL DIAMETERS

Priority: EP20130777384 20130930 US20120708308P 20121001 WO2013US62586 20130930 US20130432610 20130930

Family:

Publication number	Publication date	Application number	Application date
AU2013327622 AA	20140410	AU20130327622	20130930
CA2886643 AA	20150330	CA20132886643	20130930
CN104837733 A	20150812	CN201380062831	20130930
CO7350638 A2	20150810	CO20150095021	20150427
EP2903899 A1	20150812	EP20130777384	20130930
EP3009368 A1	20160420	EP20150192345	20130930
HK1213229 A1	20160630	HK20160101226	20160203
JP2015534526 T2	20151203	JP20150535712T	20130930
MX2015004259 A1	20150610	MX20150004259	20130930
RU2015116914 A	20161127	RU20150116914	20130930
SG11201502481Y A1	20150429	SG20151102481	20130930
TH154298 A	20160714	TH20151001835	20130930
US2015239607 AA	20150827	US20130432610	20130930
WO14055399 A1	20140410	WO2013US62586	20130930
ZA201503001 A	20160127	ZA20150003001	20150430

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC

Assignee(s): FIELDS BRIAN ; RAMSEY CHRISTOPHER PAUL

Inventor(s):(std)**:** FIELDS BRIAN ; RAMSEY CHRISTOPHER PAUL

Inventor(s): BRIAN FIELDS ; CHRISTOPHER PAUL RAMSEY

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; GOWLING LAFLEUR HENDERSON LLP; LIND ROBERT; INO SARI; KURASAWA ICHIRO; MATSUSHITA MITSURU; DESHIMARU TAKESHI; KUMAKURA YOSHIO; FULLMER HAROLD H ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D B65D17/00 B65D17/32 B65D17/34 B65D17/347 B65D17/353
B65D17/40 (Advanced/Invention);
B65D17/00 (Core/Invention);
B65D (Subclass/Invention)

CPC: B65D17/163 B65D2517/0014 B65D2517/0016 B65D17/165 B65D2517/0013 B65D2517/008 B65D2517/0062

US class: 220/272

Classification Explorer

Cited documents: WO11156140 A1, WO11053776 A1, US8157119 BB, US8109406 BB, US8047754 BB, US79717110, US7819275 BB, US6877941 BB, US6499622 BA, US2011303672 AA, US2011272406 AA, US2008099480 AA, US2004099665 AA, US2002046786 AA, CN1329559 A, CN1248948 A, CN101568474 A, CN101014504 A,

Forward Citations: WO17008961, US2015376739,

Abstract:
Source: US2015239607A A beverage can end and container have a removable panel that is actuated by a tab. The tab is smaller than conventional full aperture ends but enables opening because of the lower pull force required smaller ends or scores formed in less malleable allows that conventional food can ends. A stay−on−tab is also provided.

20) Family number: 64975003 (WO17032752A1) © PatBase

Title: CAN END FOR USER–FRIENDLY RECLOSING CAN

Priority: EP20150182075 20150821 EP20160176073 20160623

Family:

Publication number	Publication date	Application number	Application date
EP3133024 A1	20170222	EP20150182075	20150821
WO17032752 A1	20170302	WO2016EP69837	20160822

Probable Assignee: E V D S BVBA

Assignee(s):(std)**:** E V D S BVBA

Assignee(s): EVDS BVBA

Inventor(s):(std)**:** VANDERSTRAETEN ERWIN

Agent(s): IPLODGE BVBA

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 (Advanced/Invention)

CPC: B65D17/166 B65D2517/0046

Classification Explorer

Cited documents: WO14124992 A1, WO12028694 A1, EP2015054328,

Abstract:
A can end (2) is described for a metal beverage can, the can end comprising a cap top (3), arranged in connection to a pull tab (4) configured to remove the cap top from the can end to thereby create a drinking or pouring aperture; a shut–off valve (6), configured to close the drinking or pouring aperture after drinking or pouring; an elastic resilient element (10) for operating the shut–off valve (6); fixing means (50) for attaching the pull tab to the can end; holding means (21) for holding the shut–off valve (6) in an opened position for the drinking or pouring; wherein the cap top (3) is configured to remain located, after the removal, on top of the shut–off valve (6); and wherein the holding means (21) is configured to release the shut–off valve (6), when in the opened position, by exertion of a force by a user of the can, in a direction of the interior of the can, on the fixing means (50), so as to close the drinking or pouring aperture. Further, a can including such a can end and a method for opening such a can are described, as well as a method for producing such a can.

0) US2005252917A – CAN END WITH TAB FOR IMPROVED ACCESSIBILITY

21) Family number: 32398845 (US2005252917A) © PatBase

Title: CAN END WITH TAB FOR IMPROVED ACCESSIBILITY

Priority: EP20050749455 20050512 JP20070513369 20050512 US20040846416 20040514 WO2005US16687 20050512

Family:

Publication number	Publication date	Application number	Application date
AT539002 E	20120115	AT20050749455T	20050512
AU2005245413 AA	20051201	AU20050245413	20050512
AU2005245413 BB	20110811	AU20050245413	20050512
BRPI0511120 A	20071127	BR2005PI11120	20050512
CA2566777 AA	20061114	CA20052566777	20050512
CA2566777 C	20111220	CA20052566777	20050512
CN101014504 A	20070808	CN200580023700	20050512
DE602005031880 D1	20120308	DE200560031880T	20050512
EG24310 A	20090114	EG20060001084T	20061113
EP1755967 A1	20070228	EP20050749455	20050512
EP1755967 B1	20111228	EP20050749455	20050512
IN06768DN2006 A	20070831	IN2006DN06768	20061114
JP2007537108 T2	20071220	JP20070513369T	20050512
JP3166699 U	20110317	JP20110000004U	20110104
KR20070026518 A	20070308	KR20067024503	20061122
MXPA06013203 A1	20070228	MX2006PA13203	20050512
NZ551367 A	20100528	NZ20050551367	20050512
RU2006142348 A	20080620	RU20060142348	20050512
RU2344056 C2	20090120	RU20060142348	20050512
TR200606354 T2	20070122	TR20060006354T	20050512
US2005252917 AA	20051117	US20040846416	20040514
US7909196 BB	20110322	US20040846416	20040514
WO05113352 A1	20051201	WO2005US16687	20050512

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std): FORREST RANDALL G ; REKSAM BEVERIDZH KEHN KOMPANI ; REXAM BEVERAGE CAN CO ; TURNER TIMOTHY ; REXAM BEVERRAGE CAN COMPANY ; REXAM BEVERRAGE CAN CO

Assignee(s): REXAM DEVERAGE CAN CO ; REXAM BEVERAGE CAN CO CHICAGO ; REXAM BEVERAGE CAN COMPANY

Inventor(s):(std): FORREST REHNDEHLL DZH ; TERNER TIMOTI ; TIMOTHY TURNER ; TURNER TIMOTHY ; TURNER TIMOTHY FORREST RANDALL ; FORREST RANDALL ; FORREST RANDALL G

Inventor(s): FORREST RANDALL G PARK RIDGE ; TURNER TIMOTHY FORREST RANDALL G ; TURNER TIMOTHY PECATONICA ; RANDALL G FORREST

Agent(s): CULLENS PTY LTD; CULLENS PATENT AND TRADE MARK ATTORNEYS; SMART AND BIGGAR; MARKS AND CLERK LUXEMBOURG LLP; CAWLEY AIMEE ELIZABETH; PETER M KLOBUCHAR ESQ WALLENSTEIN WAGNER AND ROCKEY LTD; UNGARETTI AND HARRIS LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9):	B65D17/28 B65D17/32 B65D17/34 (Advanced/Invention); B65D17/28 B65D17/34 (Advanced/Non–invention); B65D17/28 (Core/Invention)
International class (IPC 1–7):	B65D17/34
CPC:	Y10S220/906 B65D17/16 B65D2517/0014 B65D2517/5075 B65D2517/5083
European class:	B65D17/16 L65D517/00Y2C L65D517/50Q1 L65D517/50Q5
US class:	220/269 220/906 413/14
Classification Explorer	
Cited documents:	WO9413544 A1, WO0071430 A1, USD289017 S1, US6951293 BB, US6460723 BB, US6161717 A, US6053349 A, US6024239 A, US5964366 A, US5799816 A, US5749488 A, US5741105 A, US5715964 A, US5711448 A, US5655678 A, US5494184 A, US5456378 A, US5131555 A, US5129541 A, US4930658 A, US4877129 A, US4804104 A, US4733793 A, US4576304 A, US4416389 A, US4372462 A, US4363419 A, US4276993 A, US4266688 A, US4211335 A, US4130219 A, US3984025 A, US3967754 A, US3941276 A, US3863801 A, US3795341 A, US3780902 A, US3715051 A, US3604589 A, US3591038 A, US3432067 A, US3404801 A, JPS57196640 U, JPS57196640, JP8053131 A2, JP57196640 U1, JP57196640 A2, JP2002211561 A2, JP2002021156 A2, JP1182247 A2, EP0542517 A1, CN1035088 A,
Forward Citations:	US9580204, US9566634, US9540137, US9199763, US9181007, US9033174, US9016034, US8973780, US8904843, US8875936, US8733576, US8646643, US8627978, US8328492, US8104319, US8052005, US2013240526, US2012118891, US2011308202, US2011186575, US2011139782, US2010326281, US2010116374, US2009269169, US2009266824, US2008050207, RU2572770, CN104837733, CN103910118, CN103910118,

Abstract:
Source: US2005252917A A can end for a container has a curl defining an outer perimeter of the can end. A chuckwall extends downwardly from the curl. A means for increasing the strength of the can end is integral with the chuckwall, and a center panel is integral with the means for increasing the strength of the can end. The center panel is centered about a longitudinal axis, and has a product side, a public side, a rivet, and a displaceable tear panel at least substantially defined by a frangible score and a non–frangible hinge segment. A non–detachable tab is staked to the central panel wall by the rivet. The non–detachable tab has a nose end extending over a portion of the tear panel, a lift end opposite the nose end, and a central webbing between the nose end and the lift end. The central webbing has a hinge region and a rivet island surrounding the rivet. The rivet island is at least partially surrounded by a first void region to provide a first exposed area of the central panel. The central webbing further comprises a second void region between the lift end and the first void region to provide a second exposed area of the central panel. The first and second void regions are separated by a narrow strip of the central webbing. A portion of the narrow strip extends downwardly and approaches the public side of the central panel wherein a height of the lift end of the tab above the public side of the central panel is maintained at a predetermined height.

22) Family number: 29248710 (US4813837A) © PatBase

Title: Methods of making can ends with plastics closures

Priority: CA19860518642 19860919 EP19860307127 19860916 JP19860206432 19860902 JP19860295364 19861210 JP19860295365 19861210 GB19850023263 19850920 US19860906887 19860915 US19880163186 19880225

Family:

Publication number	Publication date	Application number	Application date
AT52235 E	19900515	AT19860307127T	19860916
AU198662577 A1	19870326	AU19860062577	19860909
AU585644 B2	19890622	AU19860062577	19860909
BRPI8604497 A	19870519	BR1986PI04497	19860919
CA1266838 A1	19900320	CA19860518642	19860919
CN1007231 B	19900321	CN19871005251	19870731
CN86107457 A	19870617	CN19861007457	19860919
DE3670618 D1	19900531	DE19863670618	19860916
EP0215671 A2	19870325	EP19860307127	19860916
EP0215671 A3	19880518	EP19860307127	19860916
EP0215671 B1	19900425	EP19860307127	19860916
ES2000902 AF	19880316	ES19860001946	19860917
GB2180520 A1	19870401	GB19860022261	19860916
GB2180520 B2	19890831	GB19860022261	19860916
GB8523263 A0	19851023	GB19850023263	19850920
GB8622261 A0	19861022	GB19860022261	19860916
GR862395 B	19870120	GR19860002395	19860918
GR862395 B	19870120	GR19860102395	19860918
IN167884 A	19910105	IN1986MA00731	19860912
JP3029671 B4	19910424	JP19860221757	19860919
JP62078050 A2	19870410	JP19860221757	19860919
NO863726 A	19870323	NO19860003726	19860918
NO863726 A0	19860918	NO19860003726	19860918
NZ217628 A	19880229	NZ19860217628	19860918
SU1491328 A3	19890630	SU19864028181	19860919
TR22950 A	19881209	TR19860000507	19860918
US4813837 A	19890321	US19880163186	19880225
US4893725 A	19900116	US19880216473	19880708
ZA8606897 A	19870624	ZA19860006897	19860910

Probable Assignee: CMB FOODCAN PLC

Assignee(s):(std): CMB PACKAGING UK LTD ; METAL BOX PLC ; METAL BOKS PLS FA ; NIPPON STEEL CORP

Assignee(s): BALL MARTIN F ; CMB FOODCAN PLC ; CMB PACKAGING UK LIMITED ; MB GROUP PLC CAVERSHAM BRIDGE HOUSE WATERMAN PLACE ; CMB PACKAGING UK LTD WORCESTER GB ; MB GROUP PLC ; METAL BOX PLC A CORP OF GREAT BRITAIN ; METAL BOX P L C ; METAL BOKS PLS FIRMA ; TAYLOR JOSEPH S ; PAVELY ANDREW P

Inventor(s):(std): BALL M F ; BALL MARTIN F ; BALL MARTIN FRANK ; BALL MF ; DZHOZEF STENLI TEJLOR GB ; ENDRYU FILIP PEJVLI GB ; ANDORYUU FUIRITSUPU PEIBURII ; JOZEFU SUTANRII TEIRAA ; MARTIN FRENK BOLL GB ; PAVELY A P ; PAVELY ANDREW P ; PAVELY ANDREW PHILIP ; PAVELY AP ; TAYLOR J S ; TAYLOR JOSEPH S ; TAYLOR JOSEPH STANLEY ; TAYLOR JS

Inventor(s):	ANDORIYUU FUIRITSUPU PEIBURII ; TAYLOR JOSEPH STANLEY LONG WITTENHAM OXFORDSHIRE O ; TAYLOR JOSEPH STANLEY LONG WITTENHAM OXFORDSHIRE OX14 4RF GB ; PAVELY ANDREW PHILIP BLUNSDON WILTSHIRE SN2 4DE GB ; MAATEIN FURANKU BOORU ; MARTIN FRANK BALL ; ANDREW PHILIP PAVELY ; JIYOUZEFU SUTANRII TEIRAA ; JOSEPH STANLEY TAYLOR ; BALL MARTIN FRANK WANTAGE OXFORDSHIRE OX12 OAX GB
Agent(s):	GRIFFITH HACK; MEREDITH AND FINLAYSON
Designated states:	AT BE CH DE FR GB IT LI LU NL SE
International class (IPC 8–9):	B29C45/14 B29C45/16 B65D17/34 B65D17/347 B65D17/353 B65D17/50 B65D39/00 (Advanced/Invention); B29C45/16 B29L31/56 B65D39/00 (Advanced/Non–invention); B29C45/14 B29C45/16 B65D17/00 B65D17/28 B65D39/00 (Core/Invention)
International class (IPC 1–7):	B21D51/44 B29C45/00 B29C45/14 B29C45/16 B29L31/56 B65D17/34 B65D17/50 B65D25/36 B65D39/00 B65D41/32 B65D43/00 B65D47/36 B65D51/18
CPC:	B65D17/507 B29C45/14344
European class:	B29C45/14F2 B65D17/50B2
US class:	220/269 220/270 220/271 413/12 413/25
Classification Explorer	
Cited documents:	US4674649 A, US4576306 A, US4489018 A, US4407424 A, US4309952 A, US4170314 A, US3437227 A, JP50041964 U1, JP50041964 U, JP48037279 A2, GB2073646 A1, GB1393875 A, EP0070160 A2, EP0036763 A1,
Forward Citations:	USD747649, USD747199, USD559680, US9371152, US9181007, US8931660, US8857644, US8727169, US8505765, US8328041, US8313004, US8235244, US8205477, US7938290, US7743635, US7673768, US7651651, US7506779, US7500376, US7380684, US7311868, US7100789, US6935826, US6889862, US6877941, US6848875, US6702142, US6696123, US6677016, US6588619, US6561004, US6499622, US6408498, US6399170, US6371318, US6251325, US6065634, US5253779, US5119955, US5108003, US5045594, US4917260, US2012292329, US2011204055, US2011031256, US2010301045, US2010243663, US2010133275, US2009180999, US2009120943, US2009020543, US2008302797, US2007007294, US2006071005, US2006042344, US2005247717, US2005006395, US2004239005, US2004140312, US2004056032, US2003202862, US2003173367, RU2607176, GB2229697, GB2187712, FR2706866, EP0383442, CN102849324, CN102849324,

Abstract:
Source: US4813837A A method of making a metal can end with a tear–open plastics closure, for a can intended to be resistant to leakage when subject to internal pressures, such as arise from carbonation of a beverage or thermal processing, wherein the undersurface of the can end is provided with a plastics coating, and the can end is pierced to form an aperture with a peripheral downturned flange at an angle of 80 DEG to 120 DEG to the plane of the can end and having a flat end. A one–piece ring pull closure is injection moulded on to the can end from a plastics material resistant to softening at up to at least 67 DEG C., without additional heating of the metal, so as to fill the aperture, bond with the coating, and enclose the flange, with a residual thickness below the flange of 0.08 to 0.5 mm. The thickness of the plastics material of the closuure is such that it can be sheared against the flange when the ring pull is pulled manually. The residual thickness of the plastics material may be varied around the aperture to increase resistance of the closure to creep, and the aperture may be pear–shaped or may be circular with a separate vent hole.

0) US2011100854A – BEVERAGE CAN MARKETING DEVICE

23) Family number: 48789506 (US2011100854A) © PatBase

Title: BEVERAGE CAN MARKETING DEVICE

Priority: US20090254274P 20091023 US20100351258P 20100603 US20100406120P 20101023 US20100910792 20101023 US20120367533 20120207 US20130842023 20130315 WO2010US53881 20101023

Family:

Publication number	Publication date	Application number	Application date
CA2778711 AA	20120423	CA20102778711	20101023
CA2778711 C	20150922	CA20102778711	20101023
CN102725200 A	20121010	CN201080058801	20101023
CN102725200 B	20151202	CN201080058801	20101023
EP2490955 A2	20120829	EP20100825797	20101023
EP2490955 A4	20130320	EP20100825797	20101023
IN04469CN2012 A	20140221	IN2012CN04469	20120521
US2011100854 AA	20110505	US20100910792	20101023
US2012138620 AA	20120607	US20120367533	20120207
US2013313148 AA	20131128	US20130842023	20130315
US8534490 BB	20130917	US20100910792	20101023
US8708188 BB	20140429	US20120367533	20120207
WO11050346 A2	20110428	WO2010US53881	20101023
WO11050346 A3	20111222	WO2010US53881	20101023

Probable Assignee: CHAPIN BARRY W

Assignee(s):(std)**:** CHAPIN BARRY W

Inventor(s):(std)**:** CHAPIN BARRY W

Inventor(s): CHAPIN BARRY

Agent(s): BORDEN LADNER GERVAIS LLP; GUY ELIZABETH; CHAPIN IP LAW LLC; CHAPIN BARRY W

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A47G19/22 B65D1/40 B65D17/00 B65D25/34 B65D3/28 B65D41/32 B65D51/18 B65D8/00 B65D85/00 (Advanced/Invention)

CPC: B65D25/34 B65D2205/025 B65D2517/0056 B65D2517/0062 B65D2517/0088 B65D2517/0089 B65D85/00 B65D17/165

European class: B65D17/16B2 B65D25/34 L65D205/02A L65D517/00Y7A1A L65D517/00Y7D3B

US class: 206/459.5 206/459.500P 220/669 220/669S 220/718 220/729 220/733

Classification Explorer

Cited documents: WO9924326 A1, WO9583228 A1, WO9528328 A1, WO9302939 A1, WO10040193, WO09031111 A1, WO04108544 A1, WO03104092 A1, WO03089328 A1, WO0219878 A1, USD625190 S1, USD603218 S1, USD559680 S1, USD522860 S1, USD507485 S1, USD500343 S1, USD471453 S1, USD410844 S1, USD329603 S1, USD329602 S1, USD300607 S1, USD126200 S1, US8534490 BB, US7757887 BB, US7644833 BB, US7568586 BB, US7370774 BB, US7195130 BB, US7108469 BB, US7100789 BB, US7017769 BA, US6992586 BB, US6915553 BB, US6877607 BB, US6817819 BB, US6729495 BB, US6719166 BB, US6637616 BB, US6626314 BA, US6575324 BA, US6460723 BB, US6450358 BA, US6425493 BA, US6390749 BB, US6338418 BA, US6321927 BB, US6296137 BA, US6290084 BA, US6241114 BA, US6202881 BA, US6089072 A, US6073797 A, US6065634 A, US6053349 A, US5996832 A, US5971195

A, US5967363 A, US5934497 A, US5813561 A, US5692633 A, US5647497 A, US5645190 A, US5492077 A, US5292022 A, US5285924 A, US5273176 A, US5244111 A, US5131554 A, US5125525 A, US5119955 A, US5108003 A, US5105964 A, US5103973 A, US5014869 A, US5000338 A, US4969570 A, US4961510 A, US4941573 A, US4917258 A, US4880136 A, US4869389 A, US4834258 A, US4815628 A, US4752016 A, US4749100 A, US4741450 A, US4679702 A, US4609123 A, US4579257 A, US4087018 A, US4084525 A, US3894650 A, US3693829 A, US2812886 A, US2693685 A, US2011138742 AA, US2010332420 AA, US2010243663 AA, US2008257900 AA, US2008230544 AA, US2008217347 AA, US2008050207 AA, US2008006630 AA, US2008006600 AA, US2007187410 AA, US2007075089 AA, US2006289548 AA, US2006151501 AA, US2006070994 AA, US2005218013 AA, US2005189313 AA, US2005035018 AA, US2005035011 AA, US2005008299 AA, US2004256386 AA, US2004206764 AA, US2004108237 AA, US2004064983 AA, US2004020934 AA, US2003102313 AA, US2002158071 AA, US2002062922 AA, US2002050493 AA, US2001022305 AA, JP6171650, GB2188828 A1, EP1363836 A1, CN2312887 Y, CN2277376 Y, CN1715144 A, CN101397063 A,

Forward Citations: WO15042582, WO14150834, USD756773, USD739729, USD737142, USD736623, USD672235, US9637269, US9637267, US9340368, US9302830, US9272819, US9259913, US9248940, US9162794, US9085025, US8881938, US2017029183, US2015353229, US2015136630, US2015108130, US2014008367, US2013313148, US2013270267, US2013161219, US2013075296,

Abstract:
Source: US2011100854A A "clean can" beverage can includes a beverage can body and a beverage can top coupled to the body. The can top is shaped to define a groove between a lower inside edge of the rim of the can top and an upper surface of the can top. A non−toxic groove cover is disposed to cover the groove along at least a portion of the groove that is located adjacent to the openable section of the can top. The groove cover prevents collection of debris in the groove. The groove allows the can top to be wiped clean without debris getting stuck in the groove by sloping upwards towards the top of the tim. The groove can also cover the rim and an upper portion of the can body. The groove cover remains in place before, during and after opening of the can and while pouring to provide a more sanitary drinking experience.

0) US2011056945A – FULL APERTURE BEVERAGE END

24) Family number: 48433182 (US2011056945A) © PatBase

Title: FULL APERTURE BEVERAGE END

Priority: EP20090169559 20090904 EP20100747877 20100902 US20100797171 20100609 US20100363492F 20100610 US20100393974 20100902 EP20150151688 20100902 WO2010EP62877 20100902

Family:

Publication number	Publication date	Application number	Application date
AU2010291195 AA	20110310	AU20100291195	20100902
CA138254 S	20110720	CA20100138254F	20101208
CA2772712 AA	20110310	CA20102772712	20100902
CN102625769 A	20120801	CN201080050055	20100902
CN102625769 B	20160113	CN201080050055	20100902
CO6511215 A2	20120831	CO20120039169	20120306
DE602010032367 D1	20160602	DE201060032367T	20100902
DK2878547 T3	20160725	DK20100151688T	20100902
EP2473414 A1	20120711	EP20100747877	20100902
EP2878547 A1	20150603	EP20150151688	20100902
EP2878547 B1	20160413	EP20150151688	20100902
ES2575203 T3	20160627	ES20150151688T	20100902
HK1174313 A1	20170317	HK20130101318	20130130
HU030328 T2	20170529	HU20150151688T	20100902
JP2013503788 T2	20130204	JP20120527320T	20100902
MX2012002712 A1	20120419	MX20120002712	20100902
RU2012112951 A	20131010	RU20120112951	20100902
RU2558341 C2	20150727	RU20120112951	20100902
SG10201405480P A1	20141030	SG20141005480	20100902
SG178957 A1	20120427	SG20120014874	20100902
TH121544 A	20130228	TH20121000924	20100902
US2011056945 AA	20110310	US20100797171	20100609
US2012269934 AA	20121025	US20100393974	20100902
US8939308 BB	20150127	US20100797171	20100609
USD641239 S1	20110712	US20100363492F	20100610
WO11026900 A1	20110310	WO2010EP62877	20100902
ZA201201609 A	20121128	ZA20120001609	20120302

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CHANT GARRY RICHARD ; CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC ; RAMSEY CHRISTOPHER PAUL ; LOCKLEY ANDREW ROBERT ; FIELDS BRIAN ; WATSON MARTIN JOHN ; HYDE ELEANOR RACHEL ANN ; KRAUN PEHKEHDZHING TEKNOLODZHI INK

Assignee(s): DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; CROWN PACKAGING TECHNOLOGY INC ALSIP

Inventor(s):(std)**:** FIELDS BRIAN ; FILDZ BRAJAN ; HYDE ELEANOR RACHEL ANN ; HYDE ELEANOS RACHEL ANN ; KHAJD EHLINOR REJCHEL EHNN ; LOCKLEY ANDREW ROBERT ; LOKLI EHNDRJU ROBERT ; RAMSEY CHRISTOPHER ; RAMSEY CHRISTOPHER PAUL ; REHMSI KRISTOFER POL ; UOTSON MARTIN DZHON ; WATSON MARTIN JOHN ; ROBERT LOCKLEY ANDREW ; RICHARD CHANT GARRY ; PAUL RAMSEY CHRISTOPHER ; JOHN WATSON MARTIN ; HYDE ELEANOR RACHEL ; ANN HYDE ELEANOR RACHEL ; CHANT GARRI RICHARD ; CHANT GARRY RICHARD ; BRIAN FIELDS

Inventor(s):

ANDREW ROBERT LOCKLEY ; ELEANOS RACHEL ANN HYDE ; MARTIN JOHN WATSON ; GARRY RICHARD CHANT ; ELEANOR RACHEL ANN HYDE ; CHRISTOPHER PAUL RAMSEY ; WATSON MARTIN JOHN WANTAGE ; RAMSEY CHRISTOPHER WANTAGE ; LOCKLEY ANDREW ROBERT WANTAGE ; HYDE ELEANOR RACHEL ANN WANTAGE ; FIELDS BRIAN LEMONT ; CHANT GARRY RICHARD WANTAGE

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; FETHERSTONHAUGH AND CO; SILVANA MARIA LOPEZ DIAZ; MARKS AND CLERK LUXEMBOURG LLP; SMITH DEBRA JANE CLARE; WHITE DUNCAN ROHAN; CARPINTERO MARIO; INO SARI; KURASAWA ICHIRO; MATSUSHITA MITSURU; DESHIMARU TAKESHI; KUMAKURA YOSHIO; SPRUSON AND FERGUSON ASIA PTE LTD; BAKER AND HOSTETLER LLP; WOODCOCK WASHBURN LLP; SMITH DEBRA

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65B43/26 B65D17/00 B65D17/28 B65D17/34 B65D17/347 B65D17/353 B65D17/40 (Advanced/Invention); B65D (Subclass/Invention)

International class (IPC 1–7): B65D17/28

CPC: B65D17/24 B65D17/165 B65D1/12 B65D2517/0013 B65D17/163

European class: B65D17/16B1 B65D17/24

US class: 220/269 220/270 220/273 426/122 53/492 53/492S D7/387 D9/434 D9/435

Locarno class: 09/07

Classification Explorer

Cited documents: WO10020375 A1, WO09002715 A2, WO03068615 A1, USRE30349 E, USD591149 S1, USD570213 S1, USD567657 S1, USD559680 S1, USD525127 S1, USD515353 S1, USD488376 S1, USD480304 S1, USD431413 S1, USD406236 S1, USD379588 S1, USD358988 S1, USD356456 S1, USD328864 S1, USD30338 S1, USD30094 S1, USD286508 S1, USD265280 S1, US79697210, US79697207, US7922025 BB, US7743768 BB, US7743635 BB, US7673768 BB, US7506779 BB, US7500376 BB, US7341163 BB, US7100789 BB, US6915553 BB, US6848875 BB, US6089072 A, US6065634 A, US5971259 A, US5957647 A, US5934498 A, US5911551 A, US5860553 A, US5711448 A, US5582319 A, US5356256 A, US5232114 A, US5052573 A, US4809861 A, US4271778 A, US4182460 A, US4096967 A, US4002262 A, US3951299 A, US3485410 A, US3477608 A, US3406866 A, US3301464 A, US2683579 A, US2010059530 AA, US2008067171 AA, US2007029324 AA, US2005284869 AA, US2004026433 AA, RU2278062, JP59209533 A2, JP59133439 U1, JP59133439 U, JP59133439 A2, JP58109922 U1, JP58109922 U, JP58109922 A2, JP47022064 U1, JP47022064 U, JP47022064 A2, JP2000128168 A2, GB2168313 A1, GB1453131 A, GB1358427 A, EP2070826 A1, EP1813540 A1, EP1577222 A1, EP09169559, EP0737624 A2, CH527102 A3, CH527102 A, CH527102, CA138290 S, CA138289 S,

Forward Citations: WO15070051, WO13172783, USD787683, USD781149, USD776529, USD751922, USD711228, USD694108, USD672235, USD669781, USD658980, US9637269, US9598211, US9468964, US9365334, US9162794, US9016504, US8939311, US2017036809, US2015353229, US2014008367, EP2580135, EP2580135, CN105873830, CN102837866, CA138290, CA138289,

Abstract:
Source: US2011056945A A full aperture beverage end has a center panel, a countersink surrounding the centre panel, a main score arranged in proximity to the countersink to define a removable aperture panel and a vent score. The beverage end is adapted for use with products that are pressurized to over 30 psi (200 kPa) when opened, and during opening the vent score is adapted to sever first, controlling the pressure differential between the external surface and internal surface of the centre panel, thereby allowing the main score to tear in a controlled and reliable manner.

0) US2007278230A – TAB, TOOLING FOR THE MANUFACTURE OF THE TAB AND...

25) Family number: 40889481 (US2007278230A) © PatBase

Title: TAB, TOOLING FOR THE MANUFACTURE OF THE TAB AND METHOD OF MANUFACTURING THE TAB

Priority: EP20070762182 20070515 US20060443803 20060531 WO2007US68940 20070515 US20090571847 20091001

Family:

Publication number	Publication date	Application number	Application date
CN101583541 A	20091118	CN200780019974	20070515
CN101583541 B	20110511	CN200780019974	20070515
DE602007045662 D1	20160519	DE200760045662T	20070515
EP2027028 A2	20090225	EP20070762182	20070515
EP2027028 A4	20110720	EP20070762182	20070515
EP2027028 B1	20160406	EP20070762182	20070515
EP3025801 A1	20160601	EP20150201757	20070515
HK1136998 A1	20111230	HK20100100640	20100121
JP2009538803 T2	20091112	JP20090513369T	20070515
JP5698455 B2	20150408	JP20090513369T	20070515
US2007278230 AA	20071206	US20060443803	20060531
US2010021270 AA	20100128	US20090571847	20091001
US7614520 BB	20091110	US20060443803	20060531
US7975520 BB	20110712	US20090571847	20091001
WO07143348 A2	20071213	WO2007US68940	20070515
WO07143348 A3	20081030	WO2007US68940	20070515

Probable Assignee: STOLLE MACHINERY CO LLC

Assignee(s):(std)**:** MCELDOWNEY CRAIG ALLEN ; MITCHELL MARK RICHARD ; STOLLE MACHINERY CO LLC

Assignee(s): STOLLE MACHINERY CO LLC CENTENNIAL ; STOLLE MACHINERY COMPANY LLC ; STOLLE MACHINERY CO ; GOLDMAN SACHS CREDIT PARTNERS LP

Inventor(s):(std)**:** RICHARD MITCHELL MARK ; MITCHELL MARK RICHARD ; MCELDOWNEY CRAIG ALLEN ; ALLEN MCELDOWNEY CRAIG

Inventor(s): MCELDOWNEY CRAIG ALLEN RUSSIA ; MITCHELL MARK RICHARD SIDNEY

Agent(s): LEINWEBER AND ZIMMERMANN; PARRY SIMON JAMES ET AL; PARRY SIMON JAMES; ECKERT SEAMANS CHERIN AND MELLOTT; ECKERT SEAMANS CHERIN AND MELLOT LLC; GRANT E; ECKERT SEAMANS CHERIN AND MELLOTT LLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D19/08 B21D22/00 B21D37/08 B21D51/38 B21D51/44 B65D17/00 B65D17/32 B65D17/34 B65D17/40 (Advanced/Invention);
B21D19/12 B21D51/44 (Advanced/Non–invention);
B21D37/00 B21D51/38 B65D17/28 (Core/Invention);
B21D51/38 (Core/Non–invention);
B21D B65D (Subclass/Invention)

CPC: Y10S220/906 B65D17/163 B21D51/383 B65D2517/0016 B21D19/08 B21D19/12

European class: B21D51/38B B65D17/16B1 L65D517/00Y2D

US class: 220/269 220/906 413/12 413/25 413/25P 413/56 413/8 72/348 72/379.4 72/472 72/472S

Classification Explorer

Cited documents: US5967726 A, US5741105 A, US5590993 A, US5524698 A, US5038956 A, US4579495 A, US4530631 A, US4465204 A, US4424698 A, US4394927 A, US4361251 A, US4211335 A, US4210257 A, US4154184 A, US4130074 A, JP2000344237 A2, GB2135600 A1,

Forward Citations: USD695611, USD653109, USD612724, USD602776, USD600552, USD600118, USD600117, US9573724, US9550604, US9199763, US9016034, US8978915, US8684211, US8454292, US8109405, US2011186575, US2011147382, US2010287886, US2010116374, US2008314906, CN105499400, CN105499400,

Abstract:
Source: US2007278230A The invention generally relates to a tab used to open beer/beverage can ends and food can ends. The tab has one or more arcuate strips that are provided on a surface of the tab proximate to a peripheral surface of the tab where the one or more arcuate strips have been formed further into a preselected portion of curled or hemmed portions of the tab. Tooling for the manufacture of the tab is also provided. A method for manufacturing the tab is additionally provided as well.

0) US2015367984A – ECOLOGY CAN END WITH PRESSURE EQUALIZATION PORT...

26) Family number: 61247072 (US2015367984A) © PatBase

Title: ECOLOGY CAN END WITH PRESSURE EQUALIZATION PORT

Priority: US20140312296 20140623 WO2015US37147 20150623

Family:

Publication number	Publication date	Application number	Application date
CA2951394 AA	20161206	CA20152951394	20150623
CN106536358 A	20170322	CN201580041183	20150623
EP3157826 A1	20170426	EP20150734514	20150623
MX2016015817 A1	20170227	MX20160015817	20150623
US2015367984 AA	20151224	US20140312296	20140623
WO15200301 A1	20151230	WO2015US37147	20150623

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** REXAM BEVERAGE CAN CO

Assignee(s): FORREST RANDALL G ; GOGOLA MICHAEL R

Inventor(s):(std)**:** FORREST RANDALL G ; GOGOLA MICHAEL R ; MICHAEL R GOGOLA ; RANDALL G FORREST

Agent(s): SMART AND BIGGAR; TOMKINS AND CO; KLOBUCHAR PETER M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/32 B65D17/347 B65D47/32 (Advanced/Invention); B65D17/00 (Core/Invention)

CPC: B65D17/165 B65D47/32 B65D2517/0013 B65D2517/0091 B65D2517/0014 B65D2517/0062 B65D2517/0071 B65D2517/0074 B65D2517/0082 B65D2517/0092

US class: 220/269

Classification Explorer

Cited documents: WO04009459 A1, US7748557 BB, US6354453 BA, US5860553 A, US5555992 A, US5375729 A, US5335808 A, US5307947 A, US3744667 A, US2013126529 AA, US2009200306 AA, US2003189045 AA, FR2293369 A1,

Forward Citations: US2016052667,

Abstract:
Source: US2015367984A An ecology stay–on tab beverage can end has a first curvilinear segment of frangible score severable to form a vent region and a pressure equalization port. A second curvilinear segment of frangible score has opposing terminal ends separated by a hinge segment of the center panel. The second curvilinear segment of frangible score is severable to form a pour opening. A lifting of a lift end of a tab actuates an opening sequence in which the first curvilinear segment of frangible score is severed causing the vent region and the pressure equalization port to form before the pour opening is completely formed.

0) US2017107010A – VENTED BEVERAGE CAN AND CAN END

27) Family number: 60356747 (US2017107010A) © PatBase

Title: VENTED BEVERAGE CAN AND CAN END

Priority: US20130075622 20131108 US20130782316P 20130314 US20140950397P 20140310 WO2015US19642 20150310 US20150124408 20150310

Family:

Publication number	Publication date	Application number	Application date
AU2015229633 AA	20150917	AU20150229633	20150310
CA2942302 AA	20160909	CA20152942302	20150310
CN106488876 A	20170308	CN201580024567	20150310
CO20160001698 A2	20161121	CO20160001698	20160908
EP3116798 A1	20170118	EP20150710705	20150310
MX2016011701 A1	20161214	MX20160011701	20150310
US2017107010 AA	20170420	US20150124408	20150310
WO15138413 A1	20150917	WO2015US19642	20150310

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC

Assignee(s): FIELDS BRIAN ; DOSHI VIVEK ; KEANE BRENDAN

Inventor(s):(std)**:** BRENDAN KEANE ; BRIAN FIELDS ; DOSHI VIVEK ; FIELDS BRIAN ; KEANE BRENDAN ; VIVEK DOSHI

Agent(s): DAVIES COLLISON CAVE PTY LTD; GOWLING WLG CANADA LLP; LUZ HELENA ADARVE GOMEZ; LIND ROBERT; FULLMER HAROLD H

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D1/12 B65D17/00 B65D47/32 (Advanced/Invention); B65D17/00 (Core/Invention)

CPC: B65D17/165 B65D2517/0094 B65D1/12 B65D47/32 B65D2517/0014 B65D51/1672 B65D51/1683 B65D2517/0062 B65D2517/0082

US class: 220/269

Classification Explorer

Cited documents: WO14159208 A1, WO13067398 A2, US2011266281 AA,

Abstract:
Source: US2017107010A A beverage can end has a vent (40) that includes a button (50). The vent is actuated by downward force of a pull tab (70) that is transmitted to the vent score (42) through the button. The center panel (18) includes beads.

0) US2008217361A – BEVERAGE DISPENSING ASSEMBLY

28) Family number: 42146328 (US2008217361A) © PatBase

Title: BEVERAGE DISPENSING ASSEMBLY

Priority: EP20080731650 20080307 US20070684326 20070309 US20080014875 20080116 US20080040062 20080229 US20080088776P 20080814 US20080264023 20081103 US20090414199 20090330 US20090496051 20090701 US20090556719 20090910 WO2008US56187 20080307 US20110276488 20111019

Family:

Publication number	Publication date	Application number	Application date
AU2008226514 AA	20080918	AU20080226514	20080307
AU2008226514 BB	20140522	AU20080226514	20080307
CA2680379 AA	20080918	CA20082680379	20080307
DE602008024579 D1	20130718	DE200860024579T	20080307
EP2129596 A1	20091209	EP20080731650	20080307
EP2129596 A4	20110601	EP20080731650	20080307
EP2129596 B1	20130515	EP20080731650	20080307
EP2628692 A1	20130821	EP20130002516	20080307
ES2423707 T3	20130923	ES20080731650T	20080307
HK1138820 A1	20140214	HK20100105656	20100609
US2008217361 AA	20080911	US20070684326	20070309
US2008217362 AA	20080911	US20080014875	20080116
US2008217363 AA	20080911	US20080040062	20080229
US2009140006 AA	20090604	US20080264023	20081103
US2009261129 AA	20091022	US20090414199	20090330
US2009302038 AA	20091210	US20090496051	20090701
US2009321443 AA	20091231	US20090556719	20090910
US2012031932 AA	20120209	US20110276488	20111019
US8070023 BB	20111206	US20070684326	20070309
WO08112535 A1	20080918	WO2008US56187	20080307
ZA200906918 A	20100630	ZA20090006918	20091005

Probable Assignee: ON TAP LLC

Assignee(s):(std): VITANTONIO MARC L ; SPIRK JOHN W ; TAPPER JAY ; REPLOGLE JOHN ; RABBITT WILLIAM E ; SPIRK JR JOHN W ; TAGGART JEFFREY S ; VISY PACKAGING PTY LTD ; BROWN PATRICK W ; KALMAN JEFFREY M ; NOTTINGHAM JOHN R ; NOTTINGHAM JOHN W ; ON TAP LLC

Assignee(s): ON TAP LLC CLEVELAND HEIGHTS

Inventor(s):(std): BROWN PATRICK W ; KALMAN JEFFREY M ; NOTTINGHAM JOHN R ; NOTTINGHAM JOHN W ; RABBITT WILLIAM E ; REPLOGLE JOHN ; SPIRK JOHN W ; SPIRK JR JOHN W ; TAGGART JEFFREY S ; TAPPER JAY ; VITANTONIO MARC L

Inventor(s): VITANTONIO MARC L SOUTH RUSSELL ; WILLIAM E RABBITT ; TAPPER JAY PALM BEACH GARDENS ; SPIRK JOHN W GATES MILLS ; REPLOGLE JOHN RALEIGH ; RABBITT WILLIAM E SOLON ; NOTTINGHAM JOHN W BRATENAHL ; NOTTINGHAM JOHN R BRATENAHL ; KALMAN JEFFREY M CLEVELAND HEIGHTS ; MARC L VITANTONIO ; JAY TAPPER ; JEFFREY M KALMAN ; JOHN R NOTTINGHAM ; JOHN REPLOGLE ; JOHN W NOTTINGHAM ; JOHN W SPIRK

Agent(s): SPRUSON AND FERGUSON; DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; MUELLER BORE AND PARTNER PATENTANWAELTE PARTG MBB; MUELLER BORE AND PARTNER PATENTANWAELTE; MUELLER BORE AND PARTNER PATENTANWAELTE; PONS ANGEL; FAY SHARPE LLP; WITHROW JONATHAN A

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC

LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65B3/04 B65B43/40 B65B7/00 B65B7/28 B65D41/04 B65D43/26 B65D5/72 B65D83/00 B67D1/00 B67D1/04 B67D1/12 B67D1/16 B67D5/00 B67D5/06 B67D5/60 B67D7/06 B67D7/78 B67D99/00 (Advanced/Invention);
B67D1/00 (Advanced/Non–invention);
B65B43/40 B65B7/28 B65D41/04 B65D43/00 B65D5/72 B65D83/00 B67D1/00 B67D7/78 B67D99/00 (Core/Invention);
B65D B67D (Subclass/Invention)

CPC: B67D1/0418 B67D1/1252 B67D1/1281 B67C3/30 B67D1/0082 B67D1/0802 B67D1/0805 B67D2001/0089 B67D2001/0824 B67D1/0801 B67D1/0804 B67D1/0809 B67D1/0857 B67D1/0858 B67D1/0869 B67D1/0891 B67D1/1256 B67D1/14 B67D1/1466 B67D2210/00036

European class: B67C3/30 B67D1/00H8B B67D1/04B2 B67D1/08A12 B67D1/08A2 B67D1/08A4 B67D1/08A6 B67D1/08D B67D1/08D2 B67D1/08D4 B67D1/08K2 B67D1/12G B67D1/12H B67D1/12M2B B67D1/14 B67D1/14B6B L67D1/00H8M4 L67D1/08A L67D1/08A34B L67D210/00D2B2

US class: 141/1 141/1S 215/329 215/329S 215/44 215/44S 220/200 220/260 220/707 220/707S 222/108 222/394 222/396 222/399 222/400.7 222/464.1 222/464.100S 222/5 222/571 222/571S 222/5S 53/492 53/492S

Classification Explorer

Cited documents: WO9839246 A1, WO08155494 A1, WO08066376 A1, WO08048098 A1, WO08044923 A1, WO0067628 A1, US7631783 BA, US7188644 BB, US6824017 BB, US6814383 BB, US6651852 BB, US6616011 BB, US6553779 BA, US6546737 BA, US653516 A, US6530235 BB, US6516839 BA, US6502725 BA, US6502406 BB, US6484903 BB, US6386403 BB, US6367665 BA, US6360923 BA, US6059152 A, US5979715 A, US5979713 A, US5404901 A, US5329975 A, US5260081 A, US5129552 A, US5126552 A, US5110012 A, US5104003 A, US5096095 A, US5022565 A, US4984717 A, US4982876 A, US4940169 A, US4923095 A, US4919310 A, US4785972 A, US4765512 A, US4735348 A, US4735248 A, US4676287 A, US4632276 A, US4520950 A, US4437588 A, US4402429 A, US4383399 A, US4264019 A, US4222972 A, US4120425 A, US4116362 A, US4032047 A, US3907174 A, US3843172 A, US3822716 A, US3613954 A, US3583289 A, US3561649 A, US3434632 A, US3403820 A, US3373907 A, US3343726 A, US3327899 A, US3325053 A, US3317089 A, US3294298 A, US3294289 A, US325053 A, US3244326 A, US3239102 A, US3233779 A, US3211350 A, US3200991 A, US3195779 A, US3161327 A, US3150799 A, US3006515 A, US2917906 A, US2842293 A, US2774521 A, US2547052 A, US2319517 A, US2222247 A, US2165684 A, US2159729 A, US2125248 A, US2115052 A, US2051981 A, US2010199606 AA, US2007000941 AA, US2006169725 AA, US2005269361 AA, US2005268985 AA, US2005263578 AA, US2003205285 AA, US2003038145 AA, US1932147 A, US1835541 A, FR2693437 A1, DE98965 A,

Forward Citations: WO14205477, WO12167333, WO12062609, WO12056018, WO11130795, WO11079151, USD645694, USD645288, USD645287, USD617136, US9670048, US9604236, US9469518, US9434595, US9352949, US9248416, US9221666, US9205387, US9181021, US9126816, US9038923, US8950636, US8919669, US8906438, US8820556, US8757439, US8469242, US8464766, US8157435, US2015266713, US2015203341, US2015053277, US2014332553, US2014272052, US2014263477, US2014075888, US2013306673, US2013233895, US2013233878, US2013221034, US2013214011, US2013068798, US2013015212, US2013008898, US2012312837, US2012228311, US2011240765, US2011147406, US2011121027, US2011038989, US2011036807, US2011036414, US2010294799, US2010232256, US2010126595, US2010005811, RU2575596, JP2014520042, GB2488717, GB2488717, EP2987767, EP2447208, CN104670706, CN103344391, CN103189304, CN103189304, CN102834184, BE1020003, AU2013328605,

Abstract:
Source: US2008217361A A beverage dispensing assembly that is capable of dispensing controlled or metered portions of a beverage charged with a gas fits onto a shelf in a conventional household refrigerator. The beverage dispensing assembly includes a sealed disposable container assembly that contains the beverage and a dispensing assembly that cooperates with the container assembly to selectively unseal the container assembly and dispense controlled portions of the beverage from the container assembly.

29) Family number: 34288823 (US2007039961A) © PatBase

Title: FLEXIBLE TAB, TOOLING FOR THE MANUFACTURE OF THE FLEXIBLE TAB AND METHOD OF MANUFACTURING THE FLEXIBLE TAB

Priority: EP20060786132 20060630 US20050207046 20050818 US20100720020 20100309 WO2006US25841 20060630

Family:

Publication number	Publication date	Application number	Application date
DE602006036581 D1	20130725	DE200660036581T	20060630
EP1915296 A1	20080430	EP20060786132	20060630
EP1915296 A4	20110921	EP20060786132	20060630
EP1915296 B1	20130529	EP20060786132	20060630
JP2009515777 T2	20090416	JP20080526933T	20060630
JP4995819 B2	20120808	JP20080526933T	20060630
US2007039961 AA	20070222	US20050207046	20050818
US2010166528 AA	20100701	US20100720020	20100309
US7703624 BB	20100427	US20050207046	20050818
WO07021388 A1	20070222	WO2006US25841	20060630

Probable Assignee: STOLLE MACHINERY CO LLC

Assignee(s):(std)**:** MCELDOWNEY CARL ; MCELDOWNEY CRAIG ; MCELDWONEY CRAIG ; STOLLE MACHINERY CO LLC

Assignee(s): STOLLE MACHINERY COMPANY LLC ; STOLLE MACHINERY CO LLC SIDNEY ; GOLDMAN SACHS CREDIT PARTNERS LP ; STOLLE MACHINERY CO

Inventor(s):(std)**:** MCELDOWNEY CARL ; MCELDOWNEY CRAIG

Agent(s): LEINWEBER AND ZIMMERMANN; PARRY SIMON JAMES; ECKERT SEAMANS CHERIN AND MELLOTT; ECKERT SEAMANS CHERIN AND MELLOTT LLC; GRANT E

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D31/02 B21D51/44 B65D17/34 B65D17/347 B65D17/353 (Advanced/Invention); B21D31/00 B21D51/38 B65D17/28 (Core/Invention)

CPC: Y10S220/906 B65D17/165 B21D51/383

European class: B21D51/38B B65D17/16B2

US class: 220/268 220/269 220/270 220/906 413/14 413/14S 413/16 413/16P 413/56 413/56S 413/66 413/66S 413/67 413/67S

Classification Explorer

Cited documents: WO0128875 A1, USRE33061 E, USD419873 S1, USD415425 S1, USD390463 S1, USD332402 S1, USD296990 S1, USD289017 S1, US6951293 BB, US6575325 BB, US6026971 A, US5967726 A, US5749257 A, US5738237 A, US4994009 A, US4674649 A, US4465204 A, US4276993 A, US4247014 A, US4205760 A, US3499573 A, US2006096994 AA, US2005039314 AA, US2005006388 AA, US2003132230 AA, US2002125251 AA, JP2003512262 T2, JP2003128062 A2, JP2002211561 A2, JP200128167, JP2000128167 A2, EP0945355 A2,

Forward Citations: WO14073350, WO09048832, USD762114, USD750488, USD749415, USD708516, USD708060, USD620796, US9573724, US9561888, US9446879, US9254945, US9233784, US8904843, US8627978, US8109406, US8109405, US2015129595, US2014054332, US2013126529, US2013118133, US2012118891, US2011147382, US2010326281, US2009095752, US2008314906, US2008099480, JP2014094751, JP2011500463,

Abstract:
Source: US2007039961A The present invention generally relates to a flexible tab used to open beer/beverage can ends and food can ends. The tab has a plurality of slots provided in about a middle part of the tab between a nose portion and a lift portion on opposing sides of the tab. The slots combine to form a fulcrum that extends generally transverse to an axis that passes along a length of the tab. The fulcrum allows the lift portion to pivot upwards and downwards in relation to the nose portion. The tab also has a paneled or beaded area adjacent to the slots at about the middle part of the tab. Tooling for the manufacture of the flexible tab is also provided. A method for manufacturing the flexible tab is additionally provided as well.

0) US4065025A – EASY OPENING CAN END WITH PUSH–IN TABS

30) Family number: 3616812 (US4065025A) © PatBase

Title: Easy opening can end with push–in tabs

Priority: FR19770034080 19771114 US19750596530 19750716 US19750637867 19751204 US19760701623 19760701 US19760741664 19761115 US19770844142 19771020

Family:

Publication number	Publication date	Application number	Application date
AU197614674 A1	19771215	AU19760014674	19760607
BE844202 A1	19761116	BE19760168962	19760716
BE856375 A1	19780102	BE19770179002	19770701
BE860784 A1	19780301	BE19770182585	19771114
BR7605722 A	19770823	BR19760005722	19760716
BR7703682 A	19780321	BR19770003682	19770607
DE2630785 A1	19770203	DE19762630785	19760708
DE2728297 A1	19780105	DE19772728297	19770623
DE2751033 A1	19780524	DE19772751033	19771115
ES464168 A1	19781216	ES19770464168	19771115
FR2318076 A1	19770211	FR19760021583	19760715
FR2318076 B3	19790406	FR19760021583	19760715
FR2356567 A1	19780127	FR19770019737	19770628
FR2375101 A1	19780721	FR19770034080	19771114
IT1064892 A	19850225	IT19760025137	19760708
IT1114669 A	19860127	IT19770029629	19771114
JP52012088 A2	19770129	JP19760084460	19760715
NL7607917 A	19770118	NL19760007917	19760716
NL7704436 A	19780103	NL19770004436	19770422
NL7712565 A	19780517	NL19770012565	19771115
NO773890 A	19780518	NO19770003890	19771114
PT65147 A	19760601	PT19760065147	19760528
PT65147 B	19771013	PT19760065147	19760528
PT67275 A	19771201	PT19770067275	19771114
PT67275 B	19790418	PT19770067275	19771114
SE7712830 A	19780516	SE19770012830D	19771114
US4065025 A	19771227	US19760701623	19760701
US4078695 A	19780314	US19760741664	19761115
US4122971 A	19781031	US19770863892	19771223
US4136797 A	19790130	US19770844142	19771020
ZA7603332 A	19770629	ZA19760003332	19760604

Probable Assignee: CROWN CORK AND SEAL CO

Assignee(s):(std): CROWN CORK AND SEAL CO ; CROWN CORK AND SEAL CO IN ; CROWN CORK AND SEAL CY INC

Assignee(s): CROWN CORK AND SEAL COMPANY INC TE PHILADELPHIA PENNSYLVANIE VER ST V AM ; CROWN CORK AND SEAL CO INC ; CROWN CORK AND SEAL CO INC TE PHILADELPHIA PENNSYLVANIE VERSTVAM ; CROWN CORK AND SEAL COMPANY INC ; CROWN CORK ET SEAL CY INC ; CROWN CORK SEAL CY INC

Inventor(s):(std): BINSUN SHIRARU POTSUTSU ; POTTS V ; POTTS V S ; POTTS VINSON S ; POTTS VINSON SIRROLL ; POTTS VINSON SIRROL

Inventor(s): SIRROL POTTS VINSON ; WIRD SPAETER GENANNT WERDEN ; VINSON SIRROLL POTTS ; V S POTTS ; SIRROLL POTTS VINSON

International class (IPC 8–9):	B65D17/32 B65D17/50 (Advanced/Invention); B65D47/20 (Advanced/Non–invention); B65D17/00 B65D17/28 (Core/Invention); B65D47/04 (Core/Non–invention); B65D B67B (Subclass/Invention)
International class (IPC 1–7):	B21D51/38 B65D17/00 B65D17/16 B65D17/20 B65D41/32 B65D47/20 B65D47/36 B65D51/22 B65D7/40 B65D8/02 B67B
CPC:	B65D17/503 B65D17/506 B65D2517/0011 B65D2517/0062 B65D2517/007 B65D2517/0071 B65D2517/5027 B65D2517/002 B65D2517/0029 B65D2517/0094 B65D2517/5029 B65D17/16
European class:	B65D17/16 B65D17/50A2 B65D17/50B L65D517/00Y2A L65D517/00Y2Z L65D517/00Y4B L65D517/00Y7A1A L65D517/00Y7B1 L65D517/00Y7B2 L65D517/00Y8B L65D517/50M10A L65D517/50M10A1
US class:	220/255.1 220/258 220/265 220/268 220/269 220/271 220/821 220/825 222/541.1 222/541.6
Classification Explorer	
Cited documents:	US3982658 A, US3910453 A, US3889842 A, US3871550 A, US3843011 A, US3813000 A, US3800971 A, US3731835 A, US3622055 A, US3362569 A, US3261497 A, US3106311 A, US2147004 A,
Forward Citations:	WO9736795, WO9624528, WO12150301, WO12049280, WO11136860, WO10094793, WO08023983, WO07128810, WO02064437, WO0064761, USD747649, USD747199, USD731887, USD708516, USD708060, USD618050, USD536214, USD536213, US9637269, US9403628, US9272819, US9162796, US9162795, US9156585, US9073655, US9010561, US8931656, US8857644, US8844761, US8833585, US8783496, US8336726, US8336725, US8240498, US7950542, US7918359, US6626314, US6244455, US6114667, US5934497, US5011037, US4681238, US4473168, US4195749, US2013320013, US2011233227, US2010294768, US2010133275, US2010032433, US2009179033, US2009173737, US2008110887, US2007262079, US2007068943, RU2517607, RU2493069, NL2000193, FR2846303, FR2730214, ES2134705, ES2133046, EP2356037, EP1247752, EP0023525, EP0000091, DE4200614, CN103328340, CN103328340, CN102325702, AU2005328082, AU2002225199, AT507950,

Abstract:
Source: US4065025A A can end of the easy opening type comprises an end panel having a preformed dispensing opening and a push tab member having an integrally formed rivet for attachment to the end panel. In one embodiment, the end panel includes a peninsular hinge portion having a rivet receiving opening therein such that all deformation during opening is substantially limited to the hinge portion rather than the push–tab member. In another embodiment, an actuator opening is located between the dispensing opening and the rivet receiving opening of the end panel so as to permit a finger engageable protuberance on the push–tab member to extend therethrough.

0) US2013126529A – VENTED BEVERAGE CAN END

31) Family number: 48843543 (US2013126529A) © PatBase

Title: VENTED BEVERAGE CAN END

Priority: US20090256609P 20091030 US20100504285 20101029 US20110385515F 20110215 US20110385519F 20110215 US20110385513F 20110215 WO2010US54698 20101029

Family:

Publication number	Publication date	Application number	Application date
BR112012010300 A2	20160329	BR20121110300	20101029
CA2777915 AA	20110505	CA20102777915	20101029
EP2493776 A1	20120905	EP20100776489	20101029
US2013126529 AA	20130523	US20100504285	20101029
US9561888 BB	20170207	US20100504285	20101029
USD650276 S1	20111213	US20110385513F	20110215
USD650277 S1	20111213	US20110385515F	20110215
USD650278 S1	20111213	US20110385519F	20110215
WO11053776 A1	20110505	WO2010US54698	20101029

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** KEANE BRENDAN ; DVORAK JAN ; JOHNSON EZEKIEL ; JOHNSON EZEKIAL ; NESLING EMILY ; CROWN PACKAGING TECHNOLOGY INC

Assignee(s): DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS

Inventor(s):(std)**:** DVORAK JAN ; JOHNSON EZEKIAL ; JOHNSON EZEKIEL ; KEANE BRENDAN ; NESLING EMILY

Inventor(s): EMILY NESLING ; EZEKIEL JOHNSON ; JAN DVORAK ; BRENDAN KEANE

Agent(s): FETHERSTONHAUGH AND CO; SMITH DEBRA JANE CLARE; BAKER AND HOSTETLER LLP; WOODCOCK WASHBURN LLP; FULLMER HAROLD D ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D24/00 B65D17/00 B65D17/34 B65D51/16 B67B7/00 (Advanced/Invention)

CPC: B65D51/1672 B21D24/00 B67B7/00 B65D17/165 B65D2517/0095

European class: B65D17/16B2 L65D517/00Y8C

US class: 220/271 413/69 53/492 D9/438

Locarno class: 09/07

Classification Explorer

Cited documents: WO08008892 A1, WO0146025 A1, WO0056613 A1, WO0034137 A1, USRE42485 E, USD715647 S1, USD623963 S1, USD507485 S1, USD476889 S1, USD448666 S1, USD434983 S1, USD410844 S1, USD365274 S1, USD297309 S1, US85714501, US7975884 BB, US7594585 BA, US6761281 BB, US6715629 BB, US6354453 BA, US6079583 A, US6065634 A, US5964366 A, US5738237 A, US5655678 A, US5555992 A, US5011037 A, US4901880 A, US3977561 A, US3247997 A, US2010166528 AA, US2008067175 AA, US2003080132 AA,

Forward Citations: WO17019269, WO14152235, WO14150180, WO14149768, USD787952, USD775948, USD770895, USD762114, USD758207, USD750488, USD749415, USD742251, USD727725, USD715647, USD715144, USD698668, USD695611, US9580203, US9550604, US9446879, US9371152, US9358604, US9254945, US9233784, US9033175, US8978915, US8950619, US8931660, US8877111, US8727169, US8720717, US8567158, US8505765, US2016052667, US2016023801, US2015367984, US2014054332, EP3009368, CN105228911,

Abstract:
Source: US2013126529A A beverage can end for seaming onto a can body may include a peripheral wall, a center panel, a tab attached to the center panel by a rivet (56), a tear panel (41b), a main reference line (RM), a transverse reference line (RT), and a score (31b). The score may include arcuate main score (31b) that defines a main portion of the tear panel (41b) and a score extension (32b) that defines a vent portion. The score may be configured such that actuation of the tab from its horizontal rest position to an intermediate position ruptures the main score portion (31b) to pivot the tear panel main portion (40b) about the hinge and further actuation of the tab by twisting from the intermediate position ruptures the score extension (32b).

0) US2009095752A – TAB AND CAN END EMPLOYING THE SAME

32) Family number: 43144837 (US2009095752A) © PatBase

Title: TAB AND CAN END EMPLOYING THE SAME

Priority: EP20080838560 20081006 US20070978882P 20071010 US20080246087 20081006 WO2008US78903 20081006 US20160371847 20161207

Family:

Publication number	Publication date	Application number	Application date
CN101821168 A	20100901	CN200880111033	20081006
CN101821168 B	20120815	CN200880111033	20081006
DE602008018261 D1	20121018	DE200860018261T	20081006
EP2197755 A1	20100623	EP20080838560	20081006
EP2197755 A4	20110323	EP20080838560	20081006
EP2197755 B1	20120822	EP20080838560	20081006
JP2011500463 T2	20110106	JP20100528965T	20081006
JP5628676 B2	20141119	JP20100528965T	20081006
US2009095752 AA	20090416	US20080246087	20081006
US2017101214 AA	20170413	US20160371847	20161207
WO09048832 A1	20090416	WO2008US78903	20081006

Probable Assignee: STOLLE MACHINERY CO LLC

Assignee(s):(std)**:** MCELDOWNEY CRAIG ALLEN ; MITCHELL MARK RICHARD ; STOLLE MACHINERY CO LLC

Assignee(s): STOLLE MACHINERY CO LLC CENTENNIAL ; STOLLE MACHINERY COMPANY LLC ; STOLLE MACHINERY CO

Inventor(s):(std)**:** ALLEN MCELDOWNEY CRAIG ; MCELDOWNEY CRAIG ALLEN ; MITCHELL MARK RICHARD ; RICHARD MITCHELL MARK

Agent(s): LEINWEBER AND ZIMMERMANN; PARRY SIMON JAMES; ECKERT SEAMANS CHERIN AND MELLOTT; COFFIELD GRANT E ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/34 B65D17/347 B65D17/353 (Advanced/Invention); B65D17/28 (Core/Invention)

CPC: B65D17/165 B65D2517/0014 B65D2517/0062

European class: B65D17/16B2 L65D517/00Y2C L65D517/00Y7A1A

US class: 220/272

Classification Explorer

Cited documents: WO9424006 A1, WO07021388 A1, USD523332 S1, US6443324 BA, US6244456 BA, US6129230 A, US5647499 A, US4880137 A, US4372462 A, US4276993 A, US4211335 A, US4183445 A, US3977561 A, US3499573 A, US2007039961 AA, US2005006388 AA, JPS51132366 U, JP6156488 A2, JP51132366 U1, JP51132366 U, JP2009544539 T2, JP2009515777 T2, JP11105870 A2, GB2459387 A1,

Forward Citations: WO16021434, WO13022592, WO12017840, US9573724, US9016504, US2011147382, JP2014527003, CN105764627, CN104703886, CN102069936,

Abstract:
Source: US2009095752A A tab is provided to facilitate opening of a can end. The tab has a nose portion located at a first end of the tab and a lift portion located at a second end of the tab opposite the nose portion. A rivet receiving portion is located proximate to the nose portion, and includes a rivet hole. A flange extends rearwardly from the lift portion of the tab to define a gap. The gap provides increased space between the underside of the flange and the exterior of the container end, thereby facilitating opening of the container end.

0) US2017029194A – CAN END FOR PRESSURIZED METAL FOOD CAN WITH SHI...

33) Family number: 60954678 (US2017029194A) © PatBase

Title: CAN END FOR PRESSURIZED METAL FOOD CAN WITH SHIELDED VENT SCORE

Priority: US20140005663P 20140530 US20160289421 20161010 WO2015US32433 20150526

Family:

Publication number	Publication date	Application number	Application date
EP3148886 A1	20170405	EP20150799854	20150526
US2017029194 AA	20170202	US20160289421	20161010
WO15183812 A1	20151203	WO2015US32433	20150526

Probable Assignee: SILGAN CONTAINERS LLC

Assignee(s):(std)**:** SILGAN CONTAINERS LLC

Inventor(s):(std)**:** DUNN DAVID

Agent(s): LAWRENCE JOHN; BORCHARDT JAMES ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D1/12 B65D17/00 B65D17/34 B65D79/00 (Advanced/Invention)

CPC: B65D79/005 B65D17/163 B65D2517/0016 B65D2517/007 B65D2517/0092

US class: 220/270

Classification Explorer

Cited documents: WO9413544 A1, US6050440 A, US4043479 A, US2013026169 AA, US2011303672 AA,

Abstract:
Source: US2017029194A A vented metal can end is provided. The can end includes a tab and a tab rivet. The can end includes an outer score and a vent score. The vent score is formed in the end wall and located beneath the nose of the tab. The vent score is positioned such that the tab rivet is located between the vent score and the center point of the end wall and the vent score is also located between the outer score and the tab rivet.

0) US4137246A – FLUORINATED AROMATIC POLYENES

34) Family number: 31135280 (US4137246A) © PatBase

Title: Fluorinated aromatic polyenes

Priority:

CA19790331353 19790709
DE19873736513 19871028
GB19870026760 19871116
US19720809738 19720624
EP19790102232 19790703
US19750632028 19751114
US19760632028 19761114
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Family:

Publication number	Publication date	Application number	Application date
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US4799846 A	19890124	US19870121043	19871116	
ZA7904334 A	19800827	ZA19790004334	19790817	

Probable Assignee: F HOFFMANN LA ROCHE AG

Assignee(s):(std)**:** HOFFMANN LA ROCHE ; HOFFMANN LA ROCH CO F AG ; MINSTER MACHINE CO ; MINI MACHINE CO ; SPARAMEDICA AG ; HOFFMANN LA ROCHE LTD ; HOFFMANN LA ROCHE F AND CO AG

Assignee(s): F HOFFMANN LA ROCHE AND CO AG ; HOFFMANN LA ROCHE AND CO F ; HOFFMANN LA ROCHE F ; F HOFFMANN LA ROCHE AND CO AKTIENGESELLSCHAFT ; HOFFMANN LA ROCHE ET CIE SA ; FHOFFMANN LA ROCHE AND CO AG ; HOFFMANN LA ROCHE LIMITED ; HOFFMANN LA8 F ROCHE AND CO A G ; THE MINSTER MACHINE COMPANY ; MINSTER MACHINE CO A CORP OF OHIO ; SPARAMEDICA A G ; PAWSON BEVERLY A ; HOFFMANN LA8 F ROCHE AND CO AG ; MINISTER MACHINE CO ; MINSTER MACHINE THE COMPANY ; THE MINSTER MACHINE CO MINSTER OHIO US ; THE MINSTER MACHINE CO ; HOFFMANN LA ROCHE AND CO AG F ; HOFFMANN LA ROCHE INC ; F HOFFMANN LA ROCHE AND CO AG BASEL CH ; CHAN KA KONG ; EFU HOFUMAN RA ROSHU UNTO CO AG ; F HOFFMANN LA ROCH CO AG ; F HOFFMANN LA ROCHE AG ; F HOFFMANN LA ROCHE AND CO ; F HOFFMANN LA ROCHE AND CO A G

Inventor(s):(std)**:** PAWSON BA ; KA KONG CHAN ET BEVERLY ANN PAWSON ; WISSMAN TERRY L ; SCHOCKMAN ROBERT L ; PAWSON BEVERLY ANN ; PAWSON BEVERLY A ; PAWSON B A ; PAWSON B ; KAAKON CHIYAN ; KAAKON CHAN ; KA KONG CHAN ; CHAN KA KONG ; CHAN K K ; BEVERLY ANN PAWSON ; BEVERLY ANN PANSON ; BEBARII AN POOSON ; BEBARII AN HOOSON ; BEBARII AN BOOSON

Inventor(s): ANN PAWSON BEVERLY ; CHAN KA KONG HOPATCONG N J ; PAWSON BEVERLY ANN MONTCLAIR N J ; L SCHOCKMAN ROBERT ; L WISSMAN TERRY ; ROBERT L SCHOCKMAN ; SCHOCKMAN ROBERT L ST HENRY OHIO US ; TERRY L WISSMAN ; WISSMAN TERRY L NEW BREMEN OHIO US

Agent(s): ARTHUR S CAVE AND CO; GOWLING LAFLEUR HENDERSON LLP; REINHOLD COHN AND PARTNERS

Designated states: AT BE CH DE FR GB IT LU NL SE

International class (IPC 8–9): A61K31/045 A61K31/075 A61K31/085 A61K31/11 A61K31/165 A61K31/19 A61K31/20 A61K31/215 A61K31/22 A61K31/34 A61K31/341 A61K31/35 A61K31/38 A61K31/381 A61K31/445 A61K31/535 A61K31/54 A61P17/00 A61P35/00 B21D51/38 C07C231/00 C07C231/02 C07C233/11 C07C233/65 C07C235/34 C07C235/46 C07C27/00 C07C29/147 C07C33/48 C07C41/00 C07C41/16 C07C41/26 C07C41/48 C07C43/176 C07C43/178 C07C43/20 C07C43/225 C07C43/23 C07C43/315 C07C45/00 C07C45/26 C07C45/29 C07C45/31 C07C45/41 C07C45/45 C07C45/51 C07C47/20 C07C47/24 C07C47/273 C07C47/277 C07C49/255 C07C51/00 C07C57/60 C07C59/58 C07C59/64 C07C67/00 C07C69/025 C07C69/65 C07C69/734 C07D307/12 C07D307/16 C07D307/38 C07D307/42 C07D307/54 C07D309/12 C07D333/06 C07D333/16 C07D333/22 C07D333/24 (Advanced/Invention);
A61K31/045 A61K31/075 A61K31/11 A61K31/165 A61K31/34 A61K31/341 A61K31/38 A61K31/381 A61P35/00 C07C231/00 C07C27/00 C07C41/00 C07C45/00 C07C47/20 C07C51/00 C07C67/00 (Advanced/Non-invention);
A61K31/045 A61K31/075 A61K31/11 A61K31/165 A61K31/185 A61K31/21 A61K31/34 A61K31/341 A61K31/38 A61K31/381 A61P35/00 B21D51/38 C07C231/00 C07C233/00 C07C235/00 C07C27/00 C07C29/00 C07C33/00 C07C41/00 C07C43/00 C07C45/00 C07C47/20 C07C51/00 C07C57/00 C07C59/00 C07C67/00 C07C69/00 C07D307/00 C07D333/00 (Core/Invention)

International class (IPC 1–7): A01N9/24 A61K31/00 A61K31/035 A61K31/045 A61K31/05 A61K31/075 A61K31/08 A61K31/085 A61K31/09 A61K31/11 A61K31/16 A61K31/165 A61K31/19 A61K31/20 A61K31/21 A61K31/215 A61K31/22 A61K31/23 A61K31/325 A61K31/34 A61K31/35 A61K31/38 A61K31/445 A61K31/535 A61K31/54 B21D24/04 B21D51/44 B30B15/04 B30B9/00 C07C103 C07C103/00 C07C103/133 C07C103/175 C07C103/20 C07C103/26 C07C103/58 C07C103/76 C07C121/50 C07C125 C07C177/00 C07C33 C07C33/06 C07C33/10 C07C33/40 C07C33/46 C07C33/48 C07C43 C07C43/02 C07C43/164 C07C43/17 C07C43/176 C07C43/20 C07C43/225 C07C43/23 C07C43/28 C07C47 C07C47/20 C07C47/232 C07C47/238 C07C47/24 C07C47/26 C07C47/263 C07C47/273 C07C47/277 C07C47/48 C07C47/52 C07C47/55 C07C47/56 C07C49/248 C07C49/44 C07C49/84 C07C57 C07C57/42 C07C57/60 C07C59 C07C59/00 C07C59/64 C07C63 C07C63/52 C07C63/60 C07C65/02 C07C67/343 C07C69 C07C69/02 C07C69/025 C07C69/62 C07C69/65 C07C69/734 C07C69/76 C07D295/16 C07D307 C07D307/12 C07D307/16 C07D307/38 C07D307/42 C07D307/46 C07D307/54 C07D309/12 C07D333 C07D333/06 C07D333/16 C07D333/22 C07D333/24 C07F9/54 C09F5/00 C09F7/00 C09F7/06 C11C3/00

CPC: C07C45/26 C07C45/31 C07C49/255 C07D309/12 B21D51/383 C07C45/515 C07C45/68 C07F9/4006 C07F9/4015 C07F9/4056 C07F9/5442 Y10S514/859 Y10S514/863 Y10S514/96 Y10S514/962 C07C41/18 C07C45/29 C07C41/48 C07C45/41 C07C59/58 C07D307/12 C07D307/16 C07D333/16 C07D307/42 C07C29/147 C07C33/483 C07C41/26 C07C43/178 C07C43/225 C07C43/23 C07C45/292 C07C45/298 C07C45/45 C07C47/277 C07C59/64 C07D307/54 C07D333/22 C07D333/24

European class: 124B69/66AB 124B69/66C 124B69/66C4C 124B69/66X 124B69/76 124BC4B3C 124BC5E2C 124BC5E3C 124BD122X122+69/66AB 124BG12B3G2B3K 12Q31A2C B21D51/38B C07C29/147 C07C33/48A C07C41/16 C07C41/26 C07C41/48 C07C43/178 C07C43/225 C07C43/23 C07C43/315 C07C45/26 C07C45/29 C07C45/29C C07C45/29M C07C45/31 C07C45/41 C07C45/45 C07C45/51B6 C07C45/68 C07C47/277 C07C49/255 C07C59/58 C07C59/64 C07D307/12 C07D307/16 C07D307/42 C07D307/54 C07D309/12 C07D333/16 C07D333/22 C07D333/24 C07F9/40A1 C07F9/40A2 C07F9/40A7 C07F9/54A4

US class: 198/803.15 198/803.8 260/347.4 260/404 260/408 413/14 413/62 413/66 514/859 514/863 514/960 514/962 544/176 544/58.4 546/216 546/226 546/301 548/540 549/496 549/497 549/498 549/499 549/76 549/77 549/78 549/79 554/120 554/153 554/157 554/218 554/220 554/62 560/104 560/105 560/174 560/183 560/184 560/185 560/254 560/55 560/60 560/62 562/465 562/472 562/567 562/586 568/308 568/398 568/415 568/425 568/433 568/442 568/484 568/495 568/592 568/649 568/654 568/655 568/663 568/812 568/816 72/31.01 72/361 72/405 72/405.02 72/405.09 72/422

Classification Explorer

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Forward Citations: WO8906575, WO14144284, WO14144284, WO05016001, USRE37947, USRE35530, US9550224, US9486421, US9393610, US8777000, US8420698, US8138225, US8026280, US7902259, US7858664, US7842727, US7838463, US7464576, US7370507, US7344347, US7314953, US7312247, US7305861, US7114248, US7107671, US6887030, US6817083, US6808351, US6802683, US6695132, US6533518, US6506917, US6495719, US6405853, US6405430, US6186061, US6070713, US6022179, US5876171, US5705167, US5704754, US5534261, US5511920, US5508456, US5484052, US5344300, US5292885, US5286895, US5282531, US5182934, US5158410, US5151001, US5102278, US5096052, US5017072, US4964325, US4946028, US4936729, US4932822, US4854799, US4806558, US4751027, US4539154, US4476056, US4395575, US4335248, US2015151350, US2013140135, US2011315522, US2010116775, US2008267736, US2008083255, US2008025820, US2006010953, US2005138984, US2005049145, US2004167184, US2004020042, US2003230179, US2003192175, US2003125306, US2003083521, US2003053890, JP62120393, JP2016517353, FR2719041, EP0941830, EP0941779, EP0679628, EP0611060, EP0111124, EP0009539, EP0002533, EA11453, EA011453, DE3321662, DE102007018778, CN103084505,

Abstract:
Source: US4137246A Compounds represented by the formula wherein R1, R2 and R3 are lower alkyl, R4 is lower alkoxy, R6 and R8 are methyl or trifluoro methyl, R9 is formyl, hydroxymethyl, alkoxymethyl, alkanoyloxymethyl,

carboxyl, alkoxycarbonyl, lower alkenoxycarbonyl, lower alkynoxycarbonyl, carbamoyl, mono(lower alkyl)−carbamoyl, di(lower alkyl)carbamoyl or N−heterocyclylcarbonyl, R5, R7, R10, R11 R12 and R13 are hydrogen or fluorine with the proviso that at least one of R5, R7, R10, R11, R12 or R13 is fluorine or at least one of R6 or R8 is trifluoro methyl, OR PHARMACEUTICALLY ACCEPTABLE SALTS THEREOF USEFUL AS ANTITUMOR AGENTS ARE DISCLOSED.

0) US2014263333A – VENTED BEVERAGE CAN AND CAN END

35) Family number: 57415484 (US2014263333A) © PatBase

Title: VENTED BEVERAGE CAN AND CAN END

Priority: US20130075622 20131108 US20130782316P 20130314 WO2014US22524 20140310

Family:

Publication number	Publication date	Application number	Application date
CA2905292 AA	20150910	CA20142905292	20140310
CN105473455 A	20160406	CN201480028150	20140310
EP2969794 A1	20160120	EP20140719891	20140310
JP2016518984 T2	20160630	JP20160500987T	20140310
MX2015012259 A1	20151201	MX20150012259	20140310
TH158320 A	20161129	TH20151005228	20140310
US2014263333 AA	20140918	US20130075622	20131108
US9403628 BB	20160802	US20130075622	20131108
WO14159208 A1	20141002	WO2014US22524	20140310

Probable Assignee: CROWN PACKAGING TECH INC

Assignee(s):(std)**:** CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC

Assignee(s): DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; DOSHI VIVEK ; FIELDS BRIAN ; KEANE BRENDAN

Inventor(s):(std)**:** DOSHI VIVEK ; FIELDS BRIAN ; KEANE BRENDA ; KEANE BRENDAN

Inventor(s): VIVEK DOSHI ; BRENDA KEANE ; BRIAN FIELDS

Agent(s): GOWLING LAFLEUR HENDERSON LLP; LIND ROBERT; INO SARI; NISHIJIMA TAKAKI; MATSUSHITA MITSURU; KURASAWA ICHIRO; DESHIMARU TAKESHI; BAKER AND HOSTETLER LLP; FULLMER HAROLD H

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/44 B65D17/00 B65D17/32 B65D51/16 (Advanced/Invention); B65D17/00 B65D17/32 (Core/Invention)

CPC: B65D51/1683 B65D17/165 B65D51/1672 B65D2517/0014 B65D2517/0062 B65D2517/0082 B65D2517/0094

US class: 1/1 220/271

Classification Explorer

Cited documents: WO9325445 A1, WO13067398 A2, WO12018549 A1, WO08023983 A1, USD437223 S1, USD322222 S1, US8678221 BB, US8196767 BB, US8186532 BB, US8011527 BB, US7975884 BB, US7942285 BB, US7748563 BB, US7513383 BB, US7000797 BB, US6951293 BB, US6763964 BA, US6715629 BB, US6494332 BA, US6354453 BA, US6234338 BA, US6079583 A, US6015060 A, US5860553 A, US5695085 A, US5692636 A, US5653355 A, US5555992 A, US5494184 A, US5397014 A, US5375729 A, US5307947 A, US5285919 A, US5224618 A, US5131555 A, US5011037 A, US4367996 A, US4136797 A, US4134517 A, US4014455 A, US3967754 A, US3964632 A, US3869063 A, US3838788 A, US3795340 A, US3782586 A, US3741432 A, US3441169 A, US3215305 A, US2014054290 AA, US2013270269 AA, US2013118133 AA, US2013075401 AA, US2013037543 AA, US2012205378 AA, US2012199587 AA, US2011266281 AA, US2011108552 AA, US2011056946 AA, US2010294771 AA, US2010219187 AA, US2010018976 AA, US2009206083 AA, US2009090716 AA, US2009065518 AA, US2009039091 AA, US2009039090 AA, US2009001081 AA, US2007215621 AA, US2007051727 AA, US2007029334 AA, US2006016815 AA, US2004211786 AA, US2004159665 AA, US2004144787 AA, US2004140314 AA, US2004056032 AA, US2003192889 AA, US2003075544 AA, US2003038134 AA, US2001021281 AA, JP60150922 A2, JP5504318 T2, JP5310248 A2, JP5178345 A2,

JP2007320617 A2, JP2006347580 A2, JP2006160303 A2, JP2005343557 A2, JP2004042982 A2, JP2003285837 A2, JP2001018960 A2, JP2000185757 A2, JP11348979 A2, JP1035662, JP10035662 A2, GB2320008 A1, EP2601109 A1, EP2113293 A2, CN302188734 A, CN102951343 A, CN101910010 A, CN101244771 A, CA2280461 AA,

Forward Citations: WO16018977, WO15138413, USD762114, USD750488, USD749415, US9446879, US9233784, US9162795, US2013118133,

Abstract:
Source: US2014263333A A beverage can end has a vent that includes a button. The vent is actuated by downward force of a pull tab that is transmitted to the vent score through the button.

0) US2014263320A – BEVERAGE CAN END WITH VENT PORT

36) Family number: 57428422 (US2014263320A) © PatBase

Title: BEVERAGE CAN END WITH VENT PORT

Priority: US20130796645 20130312 WO2014US24802 20140312

Family:

Publication number	Publication date	Application number	Application date
EP2969797 A1	20160120	EP20140725563	20140312
US2014263320 AA	20140918	US20130796645	20130312
US9181007 BB	20151110	US20130796645	20130312
WO14165209 A1	20141009	WO2014US24802	20140312

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** REXAM BEVERAGE CAN CO

Inventor(s):(std)**:** FORREST RANDALL ; GOGOLA MICHAEL ; SIEGAL DEREK

Agent(s): CROOKS ELIZABETH CAROLINE; GREER BURNS AND CRAIN LTD; PETER M; KLOBUCHAR PETER M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/347 B65D51/16 (Advanced/Invention); B65D17/34 (Advanced/Non–invention)

CPC: B65D17/165 B65D2517/0014 B65D2517/0092 B65D2517/0094 B65D51/1677 B65D17/161

US class: 1/1 220/231 220/269

Classification Explorer

Cited documents: WO11031681 A1, WO08023983 A1, USD638704 S1, USD637489 S1, USD569271 S1, USD559680 S1, USD499651 S1, USD432015 S1, USD424438 S1, USD421393 S1, USD416200 S1, USD415425 S1, USD415026 S1, USD411107 S1, USD406236 S1, USD396635 S1, USD387987 S1, USD387666 S1, USD382481 S1, USD371073 S1, USD365988 S1, USD348176 S1, US8573432 BB, US8186532 BB, US8177092 BB, US8113375 BB, US8109405 BB, US7975884 BB, US7942285 BB, US7938290 BB, US7926675 BB, US7922025 BB, US7909196 BB, US7900796 BB, US7891519 BB, US7748557 BB, US7743635 BB, US7721906 BB, US7673768 BB, US7617945 BB, US7513383 BB, US7506779 BB, US7500376 BB, US7384227 BB, US7380684 BB, US7165926 BB, US7165696 BB, US7107783 BB, US7100789 BB, US7000797 BB, US6981608 BB, US6951293 BB, US6935826 BB, US6889862 BB, US6889861 BB, US6877941 BB, US6848875 BB, US6789692 BB, US6761281 BB, US6715629 BB, US6662959 BA, US6604647 BA, US6591999 BA, US6408498 BA, US6405889 BA, US6375029 BB, US6354453 BA, US6330955 BB, US6311860 BA, US6260728 BA, US6234336 BA, US6206220 BA, US6202880 BA, US6196412 BA, US6194011 BA, US6129230 A, US6126029 A, US6079583 A, US6065634 A, US6050440 A, US6024239 A, US6015060 A, US5992677 A, US5979688 A, US5971195 A, US5955127 A, US5947316 A, US5934501 A, US5906288 A, US5883814 A, US5860553 A, US5819973 A, US5782373 A, US5713481 A, US5711448 A, US5695085 A, US5692636 A, US5647499 A, US5555992 A, US5494184 A, US5397014 A, US5375729 A, US5307947 A, US5285919 A, US5244113 A, US5217134 A, US5121851 A, US5052573 A, US5038956 A, US5011037 A, US4971218 A, US4960206 A, US4951836 A, US4928845 A, US4893725 A, US4815655 A, US4778072 A, US4762246 A, US4747511 A, US4741451 A, US4705186 A, US4674649 A, US4577777 A, US4386713 A, US4213538 A, US4182460 A, US4002262 A, US3627168 A, US3485410 A, US3441169 A, US3250425 A, US3221924 A, US2012260613 AA, US2012048870 AA, US2012031056 AA, US2011266281 AA, US2011056946 AA, US2010294771 AA, US2010018976 AA, US2003080132 AA,

Forward Citations: WO17035618, USD762114,

Abstract:
Source: US2014263320A A can end for a beverage container has a center panel with a stay−on tab opening system. A tear panel is defined by a first frangible score and a non−frangible hinge segment. A tab is attached to the center panel by a rivet. The tab has a void region partially surrounding a rivet island. A first circle has a first center point located at a center of the rivet and a first radius equal to a distance from the center of the rivet to a radially outermost point of the void region on a first axis running through the nose and lift ends of the tab and a center of the rivet. A second circle has a coincident center and a second radius less than 2.5 times first radius. A second frangible score is spaced completely radially outwardly from the rivet island and between the first and second circles.

0) US2008066290A – TOOLING FOR MAKING EASY OPEN CAN END

37) Family number: 41618576 (US2008066290A) © PatBase

Title: TOOLING FOR MAKING EASY OPEN CAN END

Priority: EP20070820261 20070917 US20060533114 20060919 US20070678164 20070223 US20060533136 20060919 US20070678161 20070223 US20060533130 20060919 US20070678165 20070223 WO2007EP59794 20070917 US20090578070 20091013

Family:

Publication number	Publication date	Application number	Application date
CA2662199 AA	20090302	CA20072662199	20070917
CA2662199 C	20160503	CA20072662199	20070917
DE602007028928 D1	20130502	DE200760028928T	20070917
EP2081709 A1	20090729	EP20070820261	20070917
EP2081709 B1	20130306	EP20070820261	20070917
ES2405267 T3	20130530	ES20070820261T	20070917
MX2009002894 A1	20090401	MX20090002894	20070917
US2008066290 AA	20080320	US20060533130	20060919
US2008067171 AA	20080320	US20060533114	20060919
US2008067174 AA	20080320	US20070678161	20070223
US2008067175 AA	20080320	US20070678165	20070223
US2008069666 AA	20080320	US20060533136	20060919
US2008069667 AA	20080320	US20070678164	20070223
US2010028104 AA	20100204	US20090578070	20091013
US7673490 BB	20100309	US20060533136	20060919
US7721906 BB	20100525	US20070678161	20070223
US7784322 BB	20100831	US20070678165	20070223
US7784323 BB	20100831	US20090578070	20091013
US7909555 BB	20110322	US20070678164	20070223
US7922025 BB	20110412	US20060533114	20060919
US8047754 BB	20111101	US20060533130	20060919
WO08034801 A1	20080327	WO2007EP59794	20070917

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING COMPANY L P ; CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC ; CROWN PACKAGING UK PLC ; HEINICKE PAUL R

Assignee(s): DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; CROWN PACKAGING CO LP ; CROWN PACKAGING TECHNOLOGY INC ALSIP

Inventor(s):(std)**:** HEINICKE PAUL ; HEINICKE PAUL R

Inventor(s): HEINICKE PAUL R NW CANTON ; PAUL R HEINICKE

Agent(s): FETHERSTONHAUGH AND CO; MARKS AND CLERK LUXEMBOURG LLP; RATLIFF ISMAY HILARY; CARPINTERO MARIO; KNOBLE YOSHIDA AND DUNLEAVY; KNOBLE YOSHIDA AND DUNLEAVY LLC; KNOBE YOSHIDA AND DUNLEAVY LLC; RATLIFF ISMAY

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21C3/02 B21D11/10 B21D51/38 B21D51/44 B65D17/34 B65D17/347 B65D17/353 B65D17/40 (Advanced/Invention); B21C3/00 B21D11/00 B21D51/38 B65D17/28 (Core/Invention)

CPC:

B65D17/163 B65D17/24 B65D2517/0016 B65D2517/0092 B65D2517/0013 B65D2517/0052 Y10S220/906 Y10T29/5147 B21D51/383

European class: B21D51/38B B65D17/16B1 B65D17/24 L65D517/00Y2B L65D517/00Y2D L65D517/00Y6B L65D517/00Y8A

US class: 220/265 220/269 220/270 220/271 220/273 220/906 29/566 29/566P 413/12 413/12P 413/14 413/15 413/17 413/67 413/8 72/379.4 723/794

Classification Explorer

Cited documents: WO0009406 A1, USRE30349 E, USD312404 S1, US7721906 BB, US7472575 BB, US7270246 BB, US6524048 BA, US6126029 A, US6050440 A, US5913651 A, US5816429 A, US5655678 A, US5252019 A, US5232114 A, US5052573 A, US4848623 A, US4804106 A, US4610156 A, US4503989 A, US4416390 A, US4416389 A, US4386713 A, US4284023 A, US4182460 A, US4146149 A, US4143788 A, US4116361 A, US4096967 A, US4084722 A, US4056210 A, US4044915 A, US4014455 A, US4002262 A, US3951299 A, US3945334 A, US3941277 A, US3929252 A, US3868918 A, US3863801 A, US3799390 A, US3768692 A, US3764038 A, US3762596 A, US3744666 A, US3735892 A, US3724709 A, US3720349 A, US3715050 A, US3655091 A, US3606076 A, US3604589 A, US3593876 A, US3576272 A, US3544025 A, US3523513 A, US3501046 A, US3499573 A, US3477608 A, US3434622 A, US3404801 A, US3283946 A, US2008014050 AA, US2006060582 AA, US2006039780 AA, US2005284869 AA, JP2000190963 A2, GB2241218 A1, EP0261776 A1, CH513748 A,

Forward Citations: WO15070051, WO13172783, WO13102595, WO13102594, WO11053776, WO11026900, USD695611, USD685266, USD669781, USD650278, USD650277, USD650276, USD649049, USD647400, USD643718, USD641623, USD641622, USD641239, USD612724, USD602776, USD594329, US9663846, US9580203, US9561888, US9550604, US9517498, US9506212, US9181007, US9181006, US8978915, US8939308, US8646643, US8534485, US7922025, US2016145000, US2015239607, US2015129595, US2012125933, US2011056945, US2008067171, EP2878547, EP2612823, EP2612822, EP2580135, EP2580135, CN104144858, CN104136333, CN103221314, CN103221314, CN102625769,

Abstract:
Source: US2008066290A An improved convenience closure that is adapted for sealing an end of a can includes an end panel having a peripheral score, a rivet formation, a mustache score and a flex line score defined therein. The mustache score may include a central portion that is positioned radially inwardly on the end panel relative to the rivet formation. The central portion is preferably curved, with a concave side of the curvature facing the rivet formation. The mustache score also may include first and second preferably symmetrical end portions, each of which is continuous with the central portion. Most of the total length of each of the end portions may be curved away from a nearest portion of the peripheral score, with a convex side of curvature facing the nearest portion of the peripheral score. Tooling for making the convenience closure and a method of making such a convenience disclosure are also disclosed.

0) US2003038134A – SMALL OPENING BEVERAGE CAN END ADAPTED FOR RECE...

38) Family number: 23483250 (US2003038134A) © PatBase

Title: SMALL OPENING BEVERAGE CAN END ADAPTED FOR RECEIVING A STRAW

Priority: US20010757362 20010108 WO2002US00464 20020107

Family:

Publication number	Publication date	Application number	Application date
AU2002234229 AA	20020716	AU20020234229	20020107
AU2002234229 BB	20060316	AU20020234229	20020107
EP1358111 A1	20031105	EP20020701029	20020107
US2003038134 AA	20030227	US20010757362	20010108
WO02053468 A1	20020711	WO2002US00464	20020107

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP ; CHASTEEN HOWARD C ; LEE GENE

Inventor(s):(std)**:** CHASTEEN HOWARD C ; LEE GENE

Inventor(s): GENE LEE ; HOWARD C CHASTEEN

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZM ZW

International class (IPC 8–9): A47G19/22 B65D17/34 (Advanced/Invention); A47G19/22 B65D17/28 (Core/Invention)

International class (IPC 1–7): A47G19/22 B65D17/34

CPC: B65D17/165 B65D2517/0049 B65D2517/0094

European class: B65D17/16B2 L65D517/00Y6A L65D517/00Y8B

US class: 220/269 220/27 220/270 220/705

Classification Explorer

Cited documents: US6443324 BA, US6079583 A, US5819973 A, US5695085 A, US5253779 A, US4289251 A, US4205760 A, US4084721 A, US3757989 A, US3438578 A, US3349955 A, US3307737 A, US2003213803 AA, US2003192889 AA,

Forward Citations: USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD691039, USD624356, US9446879, US9403628, US9233784, US9162795, US9051081, US8678221, US8567158, US7735674, US2006124654,

Abstract:
Source: US2003038134A A beverage can end is provided herein which has a small opening preferably centrally disposed which is adapted for receiving a straw. Preferably, the small opening end is opened with a conventional pull tab, but which establishes a vent area positioned adjacent the small opening end which provides sufficient venting during use of the straw. It is further preferred that the pull tab be slightly elevated with rounded corners to provide a smooth, easily accessible pulling surface for the user of the beverage can.

0) US2017043903A – CAN END TEAR PANEL WITH DECORATIVE RELIEF FEATU...

39) Family number: 64904539 (US2017043903A) © PatBase

Title: CAN END TEAR PANEL WITH DECORATIVE RELIEF FEATURES

Priority: US20150824692 20150812

Family:

Publication number	Publication date	Application number	Application date
US2017043903 AA	20170216	US20150824692	20150812
WO17027802 A1	20170216	WO2016US46770	20160812

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** REXAM BEVERAGE CAN CO

Inventor(s):(std)**:** GOGOLA MICHAEL R ; MEYER JONATHAN P ; VILLASIN REX

Agent(s): KLOBUCHAR PETER M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/28 B65D17/32 B65D17/34 B65D17/347 B65D17/353 B65D17/40 (Advanced/Invention)

CPC: B65D2517/0011 B65D17/161

US class: 220/272

Classification Explorer

Cited documents: WO07007102 A2, US5715964 A, US4402421 A, US2011226636 AA, US2009200304 AA, US2001002671 AA,

Abstract:
Source: US2017043903A An ecology stay–on tab beverage can end has a center panel having a public side and an opposing product side. The center panel has a displaceable tear panel defined by a frangible score groove and a non–frangible hinge portion of the center panel located between a first end and a second end of the frangible score which retains the displaceable tear panel to the center panel subsequent to opening. The displaceable tear panel has a symbol thereon. The symbol conveys information to a user and is formed by a relief feature on the tear panel. The symbol and the relief feature are spaced at least 0.050 inches radially inwardly of the frangible score groove such that no portion of the symbol and the relief feature are closer than 0.050 inches to the frangible score.

0) US2016039563A – BEVERAGE CAN END HAVING AN ASYMMETRICAL OPENING...

40) Family number: 57468128 (US2016039563A) © PatBase

Title: BEVERAGE CAN END HAVING AN ASYMMETRICAL OPENING

Priority: US20130781480P 20130314 US20140776246 20140314 WO2014US27103 20140314

Family:

Publication number	Publication date	Application number	Application date
CA2905459 AA	20150910	CA20142905459	20140314
CN105873829 A	20160817	CN201480028149	20140314
EP2969796 A1	20160120	EP20140722866	20140314
EP2969796 B1	20170503	EP20140722866	20140314
JP2016515984 T2	20160602	JP20160502335T	20140314
MX2015012256 A1	20160425	MX20150012256	20140314
TH159438 A	20170118	TH20151005230	20140314
US2016039563 AA	20160211	US20140776246	20140314
WO14152235 A1	20140925	WO2014US27103	20140314

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CLAYDON PAUL CHARLES ; CROWN PACKAGING TECHNOLOGY INC

Assignee(s): DUNWOODY PAUL ROBERT ; RAMSEY CHRISTOPHER PAUL ; CHANT GARRY RICHARD

Inventor(s):(std)**:** CHANT GARRY RICHARD ; CLAYDON PAUL CHARLES ; DUNWOODY PAUL ROBERT ; RAMSEY CHRISTOPHER PAUL

Inventor(s): PAUL ROBERT DUNWOODY ; CHRISTOPHER PAUL RAMSEY

Agent(s): GOWLING LAFLEUR HENDERSON LLP; LIND ROBERT; INO SARI; NISHIJIMA TAKAKI; MATSUSHITA MITSURU; KURASAWA ICHIRO; DESHIMARU TAKESHI; FULLMER HAROLD H

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/32 (Advanced/Invention); B65D17/00 (Core/Invention)

CPC: B65D2517/0013 B65D2517/0059 B65D17/165 B65D1/165

US class: 220/269

Classification Explorer

Cited documents: WO11053776 A1, WO0069735 A1, US2013037542 AA, US2011272406 AA, US2009200306 AA, US2004099664 AA, US2004056032 AA, DE8915716 U, CN1681711 A, CN1308584 A,

Forward Citations: USD787952,

Abstract:
Source: US2016039563A A beverage can end for pressurized contents includes a score that defines a pair of The lobes have longitudinal axes that are not mutually parallel and in some embodiments substantially perpendicular to improve flow.

0) US2017029165A – BEVERAGE CAN END FRANGIBLE SCORE GEOMETRY

41) Family number: 64814622 (US2017029165A) © PatBase

Title: BEVERAGE CAN END FRANGIBLE SCORE GEOMETRY

Priority: US20150814993 20150731

Family:

Publication number	Publication date	Application number	Application date
US2017029165 AA	20170202	US20150814993	20150731
WO17023846 A1	20170209	WO2016US44993	20160801

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** REXAM BEVERAGE CAN CO

Inventor(s):(std)**:** FORREST RANDALL G ; GOGOLA MICHAEL R ; MEYER JONATHAN P ; VILLASIN REX

Agent(s): KLOBUCHAR PETER M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/28 B65D17/32 B65D17/34 B65D17/347 B65D17/353 (Advanced/Invention)

CPC: B65D17/165 B65D17/24 B65D2517/0013 B65D2517/0026 B65D17/161 B65D2517/0014 B65D2517/0062 B65D2517/0082 B65D2517/5097

US class: 220/269

Classification Explorer

Cited documents: US2015329238 AA, US2013292382 AA, US2011297679 AA, US2008110888 AA, US2003111469 AA, US2003080132 AA,

Abstract:
Source: US2017029165A An ecology stay−on tab beverage can end has a first axis extending though a rivet. A tear panel is defined by a frangible score and a non−frangible hinge that joins a first end of the frangible score with a second end of the frangible score. The first axis forms a line of asymmetry of the tear panel. A second axis intersects the first axis at a right angle. An intersection of the first axis with the second axis defines a center point of a clock−like reference having a 12 o'clock position at the first point and a 6 o'clock position at the second point. A first radius of curvature of the frangible score between a 5 o'clock position and a 7 o'clock position is at least 3.6 times larger than a second radius of curvature between a 7 o'clock position and a 9 o'clock position.

0) US2012031056A – CONTAINER END CLOSURE WITH OPTIONAL SECONDARY V...

42) Family number: 50609953 (US2012031056A) © PatBase

Title: CONTAINER END CLOSURE WITH OPTIONAL SECONDARY VENT OPENING

Priority: EP20110815019 20110722 US20100851979 20100806 US20130066457 20131029 US20150812146 20150729 US20140039020P 20140819 US20150829887 20150819 WO2011US44940 20110722 WO2015US45839 20150819

Family:

Publication number	Publication date	Application number	Application date
AU2011286291 AA	20120209	AU20110286291	20110722
AU2011286291 BB	20140417	AU20110286291	20110722
BR112013002863 A2	20160607	BR20131102863	20110722
CA2806879 AA	20130128	CA20112806879	20110722
CA2806879 C	20150428	CA20112806879	20110722
CA2958649 AA	20170217	CA20152958649	20150819
CN103140423 A	20130605	CN201180046744	20110722
CN103140423 B	20150826	CN201180046744	20110722
DE602011031540 D1	20161201	DE201160031540T	20110722
DK2601109 T3	20170109	DK20110815019T	20110722
EP2601109 A1	20130612	EP20110815019	20110722
EP2601109 A4	20140430	EP20110815019	20110722
EP2601109 B1	20161019	EP20110815019	20110722
ES2601810 T3	20170216	ES20110815019T	20110722
MX2013001492 A1	20130501	MX20130001492	20110722
MX337754 B	20160317	MX20130001492	20110722
PL2601109 T3	20170331	PL20110815019T	20110722
RU2013109931 A	20140920	RU20130109931	20110722
RU2573284 C2	20160120	RU20130109931	20110722
US2012031056 AA	20120209	US20100851979	20100806
US2014096491 AA	20140410	US20130066457	20131029
US2015329238 AA	20151119	US20150812146	20150729
US2016052667 AA	20160225	US20150829887	20150819
US8567158 BB	20131029	US20100851979	20100806
US9446879 BB	20160920	US20130066457	20131029
WO12018549 A1	20120209	WO2011US44940	20110722
WO16028860 A1	20160225	WO2015US45839	20150819
WO17019269 A1	20170202	WO2016US41243	20160707

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP ; BOL CORP ; CHASTEEN HOWARD C ; JACOBER MARK A

Assignee(s): GATEWOOD ERIK E ; BALL BROOMFIELD CORP ; BOL KORPOREJSHN

Inventor(s):(std)**:** CHESTIN KHOVARD K ; DZHEKOBER MARK A ; GATEWOOD ERIK E ; JACOBER MARK ; JACOBER MARK A ; CHASTEEN HOWARD ; CHASTEEN HOWARD C

Inventor(s): CHASTEEN HOWARD C WESTMINSTER ; JACOBER MARK A ARVADA ; MARK A JACOBER ; HOWARD C CHASTEEN

Agent(s): MADDERNS PATENT AND TRADE MARK ATTORNEYS; GOODWIN MCKAY; GOODWIN LAW; PARLEE MCLAWS LLP; SMART AND BIGGAR; HANNKE BITTNER AND PARTNER PATENT U RECHTSANWAELTE MBB; HANNKE CHRISTIAN; ISERN JORGE; SHERIDAN ROSS PC; KUGLER BRUCE A; KUGLER BRUCE A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE

GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65B43/39 B65B69/00 B65D17/00 B65D17/34 B65D25/00 B65D47/04 B65D47/32 B65D51/16 B67B7/00 (Advanced/Invention); B65D51/16 (Advanced/Non–invention)

CPC: B65D47/32 B65B69/00 B65D17/165 B65D2517/0014 B65D2517/002 B65D2517/0094 B65D2517/0007 B65D2517/0082 B65D2517/0089 B65D2517/0092 B65D17/24

European class: B65D17/16B2 L65D517/00Y2C L65D517/00Y2Z L65D517/00Y7B1 L65D517/00Y8B

US class: 1/1 220/229 220/269 220/269S 220/272 53/381.1 53/382.1 53/492 53/492P

Classification Explorer

Cited documents: WO9742088, WO9722531, WO9602432 A1, WO9413544, WO14150180 A1, WO13102595, WO13102594, WO12143322, WO12018549, WO11053776, WO08057207, WO08023983, WO08008892, WO0146025 A1, WO0056613, USRE30349 E, USRE28910 E, USD704555, USD691039, USD653944 S1, USD653538, USD650278, USD650277, USD650276, USD623963, USD612724, USD602776, USD600116, USD579771, USD559680 S1, USD535561, USD476889, USD448666, USD434983 S1, USD424438, USD415026, USD402887 S1, USD397296, USD396635, USD387987, USD385192 S1, USD382481, USD365274 S1, USD353769 S1, USD267633 S1, USD259403 S1, USD255425 S1, USD255424 S1, USD239256 S1, USD239255 S1, USD238659 S1, USD238150 S1, USD208591 S1, US9561888 BB, US9233784 BB, US9033174, US8998015, US8950619, US8939306, US8893913, US8646643, US8627979, US8573432, US8567158 BB, US8397935, US8336726, US8245866 BB, US8177092, US8152016, US8136689, US7975884 BB, US7918359, US7891519, US7748557 BB, US7516869, US7513383 BB, US7506779 BB, US7100789 BB, US7096759 BB, US7000797 BB, US6837093 BB, US6761281 BB, US6715629 BB, US6499329 BA, US6375029 BB, US6354453 BA, US6330954, US6202880, US6161717, US6145866 A, US6131763, US6079583 A, US6059137, US6050440, US6024239 A, US5979697 A, US5975327 A, US5964366, US5938390 A, US5911331 A, US5860553 A, US5819973, US5715964, US5713481 A, US5711448 A, US5695085, US5692636 A, US5683006 A, US5655678 A, US5653355, US5555992 A, US5494184, US5456378 A, US5405039 A, US5397014 A, US5375729 A, US5307947 A, US5285919 A, US5248053 A, US5224618 A, US5219257 A, US5131555 A, US5129541 A, US5065882 A, US5064087 A, US5011037 A, US5007554 A, US4994009 A, US4930658 A, US4901880 A, US4701090 A, US4576306 A, US4465204 A, US4448325 A, US4438865 A, US4416389 A, US4402421 A, US4397403 A, US4361251 A, US4320850 A, US4318494 A, US4305523 A, US4289251 A, US4280427 A, US4276993 A, US4267938 A, US4257529 A, US4252247 A, US4244490 A, US4244489 A, US4213538 A, US4210257 A, US4205760 A, US4196823 A, US4184607 A, US4148410 A, US4146149 A, US4128186 A, US4105133 A, US4084721 A, US4073403 A, US4062471 A, US4061243 A, US4054228 A, US4051976 A, US4039100 A, US4032034 A, US4030631 A, US4024981 A, US3982657 A, US3970212 A, US3908856 A, US3881630 A, US3877604 A, US3856184 A, US3836038 A, US3833144 A, US3826401 A, US3794206 A, US3779417 A, US3765208 A, US3762597 A, US3744667 A, US3741432 A, US3731836 A, US3618815 A, US3499573 A, US3446389 A, US3441169 A, US3370169 A, US3362569 A, US3326406 A, US3307737 A, US3262611 A, US3246791 A, US3227304 A, US3215305 A, US3169678 A, US2272111 A, US2160429 A, US2016052667 AA, US2015367984 AA, US2015329238 AA, US2015158627, US2015136776, US2015053681, US2015034648, US2014374419, US2014367382, US2014325943, US2014263333, US2014263327, US2014158685, US2014110408, US2014103044, US2014096491 AA, US2014069924, US2014054332, US2014054290, US2013299496, US2013292382, US2013270269, US2013270267, US2013264344, US2013264343 AA, US2013126529 AA, US2013118133 AA, US2013075401, US2013037543, US2013037542, US2012312815, US2012260613, US2012228296, US2012205378, US2012199587, US2012199586 AA, US2012048870 AA, US2012031056 AA, US2012012584, US2011303672, US2011297679, US2011266281 AA, US2011253719 AA, US2011240645, US2011226636, US2011168714, US2011108552, US2011056946 AA, US2010326281, US2010294771 AA, US2010251731, US2010224511, US2010044383 AA, US2010018976, US2010000997, US2009269169, US2009266824, US2009206083 AA, US2009200305 AA, US2009194536, US2009173740, US2009057315 AA, US2009039091, US2009039090, US2009001081, US2008302793, US2008110888, US2008011786 AA, US2007257035, US2007215621, US2007175896, US2007138178 AA, US2007068943, US2007045318 AA, US2007039961, US2006196875, US2006049196, US2005224497, US2005115976, US2005077316 AA, US2004211786, US2004188440, US2004144787 AA, US2004140309, US2004056032, US2003192889 AA, US2003111469 AA, US2003098306 AA, US2003075544, US2003038134 AA,

US2002139800 AA, US2002113069 AA, US2002005408 AA, US1847794 A, NL1023297 C1, NL1023297 A, KR20050059718 A, JP9301364, JP9058681, JP8151043, JP7132937, JP7132936, JP6219448, JP5178345, JP4879759, JP4311452, JP3578797, JP3009188 U, JP2013531590, JP2010215291, JP2009543737, JP2007022541, JP2006069605, JP2005088961, JP2004359339, JP2003285837, JP2001018960, JP10245032, JP10035662, GB2320008, GB2291030, GB2280165 A1, GB2280165, GB1532081, GB1436617, ES2525589, ES2458098, EP2038178, CN201343207 Y, CA2657391, CA2280461 AA,

Forward Citations: WO17019269, WO16028860, WO14150180, WO14149768, WO14031926, WO14031926, USD787952, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD698668, US9446879, US9403628, US9233784, US9181007, US9162795, US9102451, US8893913, US8875926, US2017029165, US2015053681, US2014054290, US2013240535, EP2888173, CN105745156, CN105102332, CN104703886, CN104684813,

Abstract:
Source: US2012031056A The present invention relates to an opening device for a beverage container. More specifically, the invention relates to a metal end closure having a primary opening area and at least one optional secondary vent opening which can be opened with the same pull tab. The primary opening area of the metal end closure may be opened by utilizing a pull tab interconnected to a central panel, the pull tab being adapted for applying a downward force to form a first opening. Subsequently, the pull tab is rotated and the tail end lifted to form a second opening in the end closure.

0) US4802603A – EASY OPEN CAN END

43) Family number: 2845021 (US4802603A) © PatBase

Title: Easy open can end

Priority: CA19870552045 19871117 DE19863639426 19861117 DE19863639426 19861118 DE19863639462 19861118

Family:

Publication number	Publication date	Application number	Application date
AT283587 A	19991115	AT19870002835	19871028
AU198781375 A1	19880519	AU19870081375	19871117
AU598605 B2	19900628	AU19870081375	19871117
BE1002423 AE	19910205	BE19870001288	19871113
CA1304303 A1	19920630	CA19870552045	19871117
CH678046 A	19910731	CH19870004235	19871028
DE3639426 C1	19871001	DE19863639426	19861118
DK161692 B	19910805	DK19870006032	19871117
DK161692 C	19920127	DK19870006032	19871117
DK603287 A	19880519	DK19870006032	19871117
DK603287 A0	19871117	DK19870006032	19871117
ES2009868 AF	19891016	ES19870003271	19871117
FR2606749 A1	19880520	FR19870015869	19871117
FR2606749 B1	19901130	FR19870015869	19871117
GB2197634 A1	19880525	GB19870026687	19871113
GB2197634 B2	19910327	GB19870026687	19871113
GB8726687 A0	19871216	GB19870026687	19871113
GR871689 B	19880212	GR19870001689	19871103
GR871689 B	19880212	GR19870101689	19871103
IE62705 B	19950222	IE19870003092	19871117
IE873092 L	19880518	IE19870003092	19871117
IL84523 A0	19880429	IL19870084523	19871118
IL84523 A1	19910916	IL19870084523	19871118
IT1223138 A	19900912	IT19870022662	19871117
IT8722662 A0	19871117	IT19870022662	19871117
JP1084845 A2	19890330	JP19870290431	19871117
JP2572086 B2	19970116	JP19870290431	19871117
JP64084845 A2	19890330	JP19870290431	19871117
NL192738 B	19970901	NL19870002755	19871118
NL192738 C	19980106	NL19870002755	19871118
NL8702755 A	19880616	NL19870002755	19871118
NZ222581 A	19891128	NZ19870222581	19871117
US4802603 A	19890207	US19870121640	19871116
ZA8708570 A	19880505	ZA19870008570	19871116

Probable Assignee: BROKEN HILL PROPRIETARY CO LTD

Assignee(s):(std)**:** SCHMIDT GUNTER H R ; RASSELTEIN AG ; RASSELSTEIN AG ; BROKEN HILL PTY CO LTD

Assignee(s): BROKEN HILL PTY CO LTD THE ; JOGE HANS DIETER ; RASSELSTEIN A G ; BROKEN HILL PROPRIETARY CO A CORP OF AUSTRALIA LTD ; BROKEN HILL PROPRIETARY CO LTD ; BROKEN HILL PROPRIETARY CO THE LTD ; THE BROKEN HILL PROPRIETARY COMPANY LIMITED ; RASSELSTEIN AG 5450 NEUWIED DE ; RASSELSTEIN AKTIENGESELLSCHAFT ; THE BROKEN HILL PTY CO LTD ; RASSELSTEIN AKTIENGESELLSCHAFT TE NEUWIED A D RIJN BONDSREPUBLIEK

DUITSLAND ; SAUER WILHELM REINER ; SCHMIDT GUNTER HELMUT REINHOLD ; SPRUIT ABRAHAM C ; SCHMIDT GUNTER HR

Inventor(s):(std) HANSUUDEIITERU YOGE ; JOEGE DIETER ; JOEGE DIETER DR ; JOGE DIETER ; JOGE DR DIETER ; JOGE H D ; JOGE HANS DIETER ; REINER SAUER ; SAUER DR REINER ; SAUER REINER ; SAUER REINER DR ; SAUER W R ; SAUER WILHELM R ; SAUER WILHELM REINER ; SAVER WILHELM REINER ; SCHMIDT G H R ; SCHMIDT GUENTER ; ABRAHAM C SPRUIT ; ABRAHAM SPRUIT ; ABURAHAMU SHII SUPURUITO ; BIRUHERUMU REINERU ZABEERU ; DIETER JOEGE ; GUENTER SCHMIDT ; SCHMIDT GUNTER ; SCHMIDT GUNTER H R ; SCHMIDT GUNTER HELMUT REINHOLD ; GIYUNTAA HERUMUUTO REINHORUTO ; SPRUIT A C ; SPRUIT ABRAHAM ; SPRUIT ABRAHAM C

Inventor(s): WILHELM REINER SAUER ; SPRUIT ABRAHAM BEVERWYK BD ; GIYUNTAA HERUMUUTO REINHORUTO SHIYUMITSUTO ; SCHMIDT GUNTER HR ; GUNTER HELMUT REINHOLD SCHMIDT ; GUNTER SCHMIDT ; HANS DIETER JOGE ; DIETER JOGE ; DR DIETER JOGE ; DR REINER SAUER ; SCHMIDT GUENTER 5450 NEUWIED DE

Agent(s): KIRBY EADES GALE BAKER; WOLFF BREGMAN AND GOLLER

International class (IPC 8–9)**:** B21D28/00 B21D51/44 B21D51/46 B65D17/00 B65D17/32 B65D17/34 B65D41/32 B65D53/06 C08J5/12 C08L27/06 (Advanced/Invention); C08J5/12 (Advanced/Non–invention); B21D28/00 B21D51/38 B65D17/00 B65D17/28 B65D41/32 B65D53/00 C08L27/00 (Core/Invention); C08J5/12 (Core/Non–invention); B21D B65D (Subclass/Invention)

International class (IPC 1–7)**:** B21D28/00 B21D51/44 B21D51/46 B65D17/00 B65D17/32 B65D17/34 B65D41/32 B65D53/06 C08J3/08 C08J5/12 C08L27/06

CPC: B65D17/161 B65D2205/00

European class: B65D17/16B L65D205/00

US class: 220/268 413/12 413/15

Classification Explorer

Cited documents: US4319692 A, US4311249 A, US4196823 A, US4134517 A, US4128186 A, US4054228 A, US3972445 A, US3909488 A, GB2053841 A1, GB2053134 A1, GB1593114 A, GB1532751 A, GB1483145 A, FR2271888 A1, FR2162116 A1, EP0021843 A1, DE2421315 C3,

Forward Citations: WO9619528, USD448295, USD442086, US9622502, US6274210, US6086786, US6007885, US5993688, US5798055, US5566850, US5362531, US5204389, US5186991, US5183848, US5106886, US5075362, JP5677304, JP5520223, JP2012505663, JP2010537631, FR2661659, EP0531039, DE9010816, DE3941432, DE102006062766, DE102006061014, DE102006061014, AU646970,

Abstract:
Source: US4802603A A can end (1) made from metal for cans whose contents is under inside pressure is provided with at least one opening tab (4) partly punched from the end leaving a hinge area (6) and a relative aperture (2) formed by the partial punching, with the opening tab (4) and/or the area of the end surrounding the aperture (2) being cold formed so that the edge area (8) of aperture (2) covers the edge area (4a) of opening tab (4) on the end outside (1a). On the end inside (1b), plastisol (10) is applied in ring–form to the edge areas (4a, 8) of opening tab (4) and of aperture (2) and jellied under heating. Before its application and gelation respectively, the plastisol (10) has a viscosity eta D4441s–1 (40 DEG C.) of about 2000–2800 mPa.s, and an edge angle alpha of about 0.4–1.0 N/mm2, and a maximum elongation of 120–250 percent.

0) US2002158071A – BEVERAGE CAN END WITH OUTWARDLY EXTENDING REINF...

44) Family number: 28276180 (US2002158071A) © PatBase

Title: BEVERAGE CAN END WITH OUTWARDLY EXTENDING REINFORCING BEAD

Priority: US20010271629P 20010226 US20020084267 20020225 WO2002US05933 20020225

Family:

Publication number	Publication date	Application number	Application date
AU2002252126 AA	20020912	AU20020252126	20020225
BRPI0207838 A	20040622	BR2002PI07838	20020225
CN1500051 A	20040526	CN20028007621	20020225
EP1385747 A1	20040204	EP20020721183	20020225
JP2004524229 T2	20040812	JP20020567614T	20020225
MXPA03007728 A1	20040316	MX2003PA07728	20020225
PL363684 A1	20041129	PL20020363684	20020225
RU2003129643 A	20050327	RU20030129643	20020225
US2002158071 AA	20021031	US20020084267	20020225
WO02068281 A1	20020906	WO2002US05933	20020225
YU67303 A	20041125	YU20030000673	20020225

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP ; CHASTEEN HOWARD C ; JACOBER MARK A

Inventor(s):(std)**:** CHASTEEN HOWARD ; CHASTEEN HOWARD C ; CHASTEEN HOWARD CO ; CHASTEEN HOWARD CURTIS ; HOWARD CO CHASTEEN ; JACOBER MARK ; JACOBER MARK A ; MARK A JACOBER

Inventor(s): HOWARD CURTIS CHASTEEN

Agent(s): ASHURST AUSTRALIA

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW

International class (IPC 8–9): B21D51/26 B21D51/30 B21D51/44 B65D1/16 B65D6/30 B65D8/04 B65D8/06 B65D8/12 B65D8/20 (Advanced/Invention)

International class (IPC 1–7): B21D51/26 B21D51/30 B21D51/44 B65D1/16 B65D6/30 B65D8/04 B65D8/06

CPC: B65D7/36 B65D17/08 B65D17/165

European class: B65D17/08 B65D17/16B2 B65D7/36

US class: 220/269 220/619 220/619S

Classification Explorer

Cited documents: US6428261 BA, US6158608 A, US6102243 A, US5878906 A, US5636761 A, US5346087 A, US4361246 A, US4077538 A, US3891117 A, US3630408 A,

Forward Citations: WO13057250, WO07005564, WO07005564, USD787952, USD698668, USD672235, USD658980, USD640141, US9540137, US9371152, US8973780, US8931660, US8875936, US8789721, US8727169, US8708188, US8534490, US8505765, US8328492, US8313004, US8235244, US8205477, US8167123, US8104319, US8052005, US8011527, US7938290, US7743635, US7644833, US7556168, US7506779, US7350392, US7174762, US7004345, US6915553, US6772900, US2016122068, US2012125935, US2011174646, US2011100854, US2009269169, US2009266824, US2009200321, US2009039091, US2008257900, US2008050207, US2006096994, US2005006388, US2004200838, US2004159697, US2003001788, JP2012135804, JP2012091190, JP2009500175, EP2165940, EP2165940, EP1907150, CN104024116, CN104024116, CN103282138, AU2012324816,

Abstract:
Source: US2002158071A The present invention discloses a beverage can end having an outwardly concave reinforcing bead with an upper lip which extends outwardly beyond a substantially vertical plane defined by a downwardly extending chuck wall.

0) US2002113069A – CAN END FOR A CONTAINER

45) Family number: 28230940 (US2002113069A) © PatBase

Title: CAN END FOR A CONTAINER

Priority: EP20010995390 20011204 US20000748927 20001227 US20020317636 20021212 WO2001US46786 20011204

Family:

Publication number	Publication date	Application number	Application date
AT377560 E	20071115	AT20010995390T	20011204
AT457839 E	20100315	AT20010115237T	20011204
AT469041 E	20100615	AT20010115235T	20011204
AU2002225955 AA	20020708	AU20020225955	20011204
BR0116603 A	20040210	BR20010016603	20011204
BRPI0116603 A	20040210	BR2001PI16603	20011204
BRPI0116603 B1	20121127	BR2001PI16603	20011204
CN1315697 C	20070516	CN20018022478	20011204
CN1487896 A	20040407	CN20018022478	20011204
DE60131296 D1	20071220	DE20016031296	20011204
DE60131296 T2	20080828	DE20016031296T	20011204
DE60141367 D1	20100401	DE20016041367	20011204
DE60142262 D1	20100708	DE20016042262	20011204
EP1353852 A1	20031022	EP20010995390	20011204
EP1353852 A4	20050831	EP20010995390	20011204
EP1353852 B1	20071107	EP20010995390	20011204
EP1857196 A2	20071121	EP20070115237	20011204
EP1857196 A3	20071128	EP20070115237	20011204
EP1857196 B1	20100217	EP20070115237	20011204
EP1857370 A2	20071121	EP20070115235	20011204
EP1857370 A3	20080514	EP20070115235	20011204
EP1857370 B1	20100526	EP20070115235	20011204
ES2295240 T3	20080416	ES20010995390T	20011204
ES2345007 T3	20100913	ES20070115235T	20011204
MXPA03005928 A1	20050214	MX2003PA05928	20011204
RU2003123113 A	20041010	RU20030123113	20011204
RU2283265 C2	20060910	RU20030123113	20011204
US2002113069 AA	20020822	US20000748927	20001227
US2003080132 AA	20030501	US20020317636	20021212
US7000797 BB	20060221	US20020317636	20021212
WO02051710 A1	20020704	WO2001US46786	20011204

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** REKSEHM BEVERIDZH KEHN KOMPANI ; REXAM BEVERAGE CAN CO ; TURNER TIMOTHY

Assignee(s): FORREST RANDY G ; REXAM BEVERAGE CAN COMPANY

Inventor(s):(std)**:** FORREST RANDY ; FORREST RANDY G ; FORREST REHNDALL DZH ; RANDY G FORREST ; TERNER TIMOTI L ; TIMOTHY TURNER ; TURNER RANDY G FORREST TIMOTHY ; TURNER TIMOTHY

Inventor(s): RANDY G FORREST TIMOTHY TURNER

Agent(s): LANE CATHAL MICHAEL; WALLENSTEIN WAGNER AND ROCKEY LTD

Designated states:

AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MT MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZM ZW

International class (IPC 8–9): B21D22/30 B65D1/00 B65D17/34 (Advanced/Invention); B21D22/20 B65D17/28 (Core/Invention)

International class (IPC 1–7): B21D22/30 B65D17/34

CPC: Y10S220/906 B65D17/08 B65D7/36 B65D17/165 B65D2517/0014 B65D2517/0062 B65D2517/007 B65D2517/0076

European class: B65D17/08 B65D17/16B2 B65D7/36 L65D517/00Y2C L65D517/00Y7A1A L65D517/00Y7B1 L65D517/00Y7C1

US class: 220/269 220/906 413/6

Classification Explorer

Cited documents: WO9901351 A2, WO9834743 A1, WO9822356 A1, WO9729960 A2, WO0069735 A1, USRE33217 E, USRE31702 E, USD402555 S1, USD397296 S1, USD396635 S1, USD385192 S1, USD382481 S1, USD371073 S1, USD365988 S1, USD364807 S1, USD347172 S1, USD346745 S1, USD338156 S1, USD332750 S1, USD327424 S1, USD320153 S1, USD319580 S1, USD318225 S1, USD302116 S1, USD279265 S1, USD275373 S1, USD267393 S1, USD266991 S1, USD265463 S1, USD263803 S1, USD263802 S1, USD244915 S1, US6065634 A, US6024239 A, US5964366 A, US5962636 A, US5934498 A, US5875911 A, US5860553 A, US5738237 A, US5715964 A, US5711448 A, US5692636 A, US5555992 A, US5527442 A, US5456378 A, US5405039 A, US5385254 A, US5375729 A, US5307947 A, US5287718 A, US5199591 A, US5149238 A, US5129541 A, US5119664 A, US5064087 A, US5046637 A, US5011037 A, US4994009 A, US4991735 A, US4930658 A, US4930654 A, US4928844 A, US4880136 A, US4872597 A, US4865506 A, US4862722 A, US4832223 A, US4808052 A, US4804104 A, US4796772 A, US4790705 A, US4749100 A, US4735863 A, US4733793 A, US4722215 A, US4716755 A, US4713958 A, US4704887 A, US4641761 A, US4606472 A, US4577774 A, US4571978 A, US4561280 A, US4559801 A, US4549424 A, US4530631 A, US4516420 A, US4465204 A, US4434641 A, US4420283 A, US4387827 A, US4363419 A, US4361251 A, US4320850 A, US4305523 A, US4276993 A, US4266688 A, US4217843 A, US4211335 A, US4210257 A, US4205760 A, US4184607 A, US4175670 A, US4130219 A, US4109599 A, US4093102 A, US4084721 A, US4062471 A, US4061243 A, US4031837 A, US4030631 A, US4024981 A, US4015744 A, US3967752 A, US3957005 A, US3941277 A, US3583348 A, US3424337 A, US3291336 A, US3259265 A, US3215305 A, JP6024443, JP1308744, GB2193140 A1, GB2067159 A1, GB1604068, EP0704382 A2, EP0621195 A2, EP0564725 A1, EP0497346 B1, EP0381888 B1, EP0191271 A2, EP0103074 A2,

Forward Citations: WO17023846, WO17019269, WO14165209, WO14151503, WO12112487, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD704555, USD691039, USD653944, USD650278, USD650277, USD650276, USD612724, USD602776, USD600552, USD600118, USD600117, USD600116, USD579771, US9580203, US9561888, US9446879, US9403628, US9233784, US9199763, US9181007, US9162795, US9051081, US9033175, US9016034, US8950619, US8783495, US8733576, US8678221, US8567158, US8511125, US8371467, US8328492, US8104319, US8052005, US7975884, US7350392, US6761281, US6715629, US2015353228, US2014263332, US2012205378, US2011186575, US2009269169, US2009266824, US2008295558, US2008050207, US2008011786, US2004211780, RU2486118, ES2525589,

Abstract:
Source: US2002113069A An end member for a container having a circumferential sidewall, the end member having a peripheral seaming edge adapted to be integrally connected to the sidewall, and having a central panel wall with a means for opening a frangible panel segment of the panel wall is claimed. The end member comprises a deboss panel recessed in the central panel. The deboss panel has first and second spaced apart end portions joined by first and second sidewalls. The first spaced apart end portion has an apex and first and second arcuate portions. A distance between the first and second arcuate portions is defined by a plurality of progressively increasing secant lengths located in spaced relation from the apex. A score groove is located within the deboss panel defining an outer perimeter of the frangible panel segment. The score groove has a first end and a second end joined to the first end by a curvilinear segment. The first end and the second end are separated by a generally linear hinge segment of the central panel wall. The curvilinear segment includes first and second curved segments joined by a transition point located adjacent the apex of the deboss panel. The generally arcuate transition region is defined by a plurality of progressively increasing chordal lengths located in spaced relation from the apex of the deboss panel. A ratio of the plurality of progressively increasing secant lengths to the progressively increasing chordal lengths increases along respective lengths of the first and second arcuate portions of the deboss panel.

0) US2013098925A – CAN END HAVING AN ANNULAR RIB

46) Family number: 53536887 (US2013098925A) © PatBase

Title: CAN END HAVING AN ANNULAR RIB

Priority: US20110549797P 20111021 US20120656358 20121019

Family:

Publication number	Publication date	Application number	Application date
US2013098925 AA	20130425	US20120656358	20121019

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING TECHNOLOGY INC

Assignee(s): DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS

Inventor(s):(std)**:** DUNWOODY PAUL ROBERT

International class (IPC 8–9): B21D51/26 B65D8/00 (Advanced/Invention)

CPC: B21D51/44 B65D2517/0062 B65D17/165

US class: 220/604 413/1 413/69

Classification Explorer

Cited documents: US2014252011 AA, US2010006571 AA, US2007007294 AA, US2006096994 AA, US2003042258 AA,

Abstract:
Source: US2013098925A A can end includes an annular rib that may be inclines. Some embodiments of the bead form a teardrop shape. The bead of other embodiments are open. A combination beverage can end and can body, and the tooling and method for forming the can end are provided.

47) Family number: 28256000 (US2001019058A) © PatBase

Title: Cover mountable to beverage container and mounting method and apparatus thereof

Priority: DE20001018685 20000414 KR19990029106U 19991222 KR19990035332 19990825 KR19990051022 19991117 KR19990058534 19991217 KR20000002006 20000125 KR20000005570 20000229 KR20000005571 20000229 US20010853810 20010511 US20000534203 20000324 US20010853815 20010511 KR20000002006U 20000125 KR20000005570U 20000229 KR20000005571U 20000229 US20020062166 20020131 WO2000KR00304 20000404

Family:

Publication number	Publication date	Application number	Application date
AU200036819 A5	20010319	AU20000036819	20000404
DE10018685 A1	20010607	DE20001018685	20000414
DE10018685 C2	20030618	DE20001018685	20000414
DE10066012 C2	20030710	DE20001066012	20000414
DE10066014 C2	20030703	DE20001066014	20000414
JP2001072113 A2	20010321	JP20000090328	20000329
KR100353681 B1	20020919	KR19990058534	19991217
KR19990083877 A	19991206	KR19990035332	19990825
KR20000006983 A	20000207	KR19990051022	19991117
KR20000017810 A	20000406	KR19990058534	19991217
KR200183702 Y1	20000601	KR19990029106U	19991222
KR200195208 Y1	20000901	KR20000005570U	20000229
KR200195209 Y1	20000901	KR20000005571U	20000229
KR200202465 Y1	20001115	KR20000002006U	20000125
US2001019058 AA	20010906	US20010853815	20010511
US2001040163 AA	20011115	US20010853810	20010511
US2002070219 AA	20020613	US20020062166	20020131
US6386814 BB	20020514	US20010853810	20010511
US6390749 BB	20020521	US20010853815	20010511
WO0114218 A1	20010301	WO2000KR00304	20000404

Probable Assignee: KANGSAN TECHNOLOGIES LTD

Assignee(s):(std)**:** CONIC KOREA INC ; KANG SAN TECHNOLOGIES LTD ; KANG SAN TECHNOLOGY LTD ; KANGSAN TECHNOLOGIES LTD

Assignee(s): KANGSAN TECHNOLOGIES LTD SEOUL SOUL

Inventor(s):(std)**:** SONG JONG HOON ; SONG JONGHOON

Inventor(s): JONG HOON SONG ; SONG IK SEON

Agent(s): SUZUKI SATORU

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT KE KG KP KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

International class (IPC 8–9): B21D51/38 B65B7/28 B65D17/00 B65D17/28 B65D17/50 B65D41/62 B65D43/00 B65D51/00 B65D51/02 B65D51/24 B65D77/20 (Advanced/Invention); B21D51/38 B65B7/28 B65D17/00 B65D17/28 B65D17/50 B65D43/00 B65D51/24 (Advanced/Non–invention); B21D51/38 B65D17/00 B65D43/00 (Core/Invention)

International class (IPC 1–7): A47G19/22 B21D51/26 B21D51/38 B21D51/44 B65B61/18 B65B7/28 B65D17/00 B65D17/50 B65D43/00 B65D43/02 B65D51/02 B65D51/20 B65D51/22 B65D51/24 B65D77/20

CPC: B65D17/165 B65D51/007 B65D2517/0013 B65D2517/0025 B65D2517/004 B65D2517/0041 B65D2517/0098

European class: B65D17/16B2 B65D51/00F L65D517/00Y2B L65D517/00Y3B L65D517/00Y5D L65D517/00Y5D1 L65D517/00Y9

US class: 220/253 220/253S 220/254.4 220/254.400P 220/257.2 220/257.200S 220/258 220/258.2 220/258.200P 220/258.200S 220/258.5 220/258.500S 220/716 220/716S 220/730 220/730S 413/12 413/13 413/13S 413/14 413/2 413/45 413/47 413/47S 413/52 413/52S 413/53 413/54 413/66 413/78 53/133.2 53/133.200S 53/139.5 53/410 53/412 53/412S

Classification Explorer

Cited documents: US5893489 A, US5720412 A, US5707196 A, US5692616 A, US5421472 A, US5269432 A, US5147057 A, US5142769 A, US5131554 A, US5119311 A, US5102002 A, US5071019 A, US4938379 A, US4927048 A, US4880136 A, US4852763 A, US4717039 A, US4681238 A, US4213537 A, US4205759 A, US4166424 A, US4136629 A, US4092940 A, US4026226 A, GB547229 A,

Forward Citations: WO17027727, WO15152592, WO15109349, WO13020706, WO12010258, WO12007496, WO09001984, WO07053277, WO02085628, USD787952, USD672235, USD658980, USD654791, USD653538, USD632562, USD578392, USD500343, US8998028, US8881940, US8875926, US8708188, US8622238, US8579148, US8534490, US8201706, US7914640, US7475787, US7025224, US2014251997, US2013240535, US2012312815, US2011100854, US2010065573, US2009057314, US2009026201, US2008230544, US2008197618, US2007138187, US2007095847, US2006281965, US2006163251, US2006102629, US2005211708, US2004065662, NL2004639, KR200454700, JP2008543692, GB2441602, FR2853124, EP2557050, EP2502838, EP2409925, CN103287703, BE1018936,

Abstract:
Source: US2001019058A Disclosed is a cover mountable to a beverage container and mounting method and apparatus thereof. The container cover detachably mountable to an upper surface of a beverage container comprises a body which is formed to have substantially a disc−shaped configuration. The body is partly cut away from an edge toward a center thereof thereby to define a beverage discharging opening which has a predetermined width and a predetermined contour. The beverage discharging opening is capable of being selectively communicated with a discharging hole of the beverage container as the body is rotated. An inner end of the beverage discharging opening is delimited by a rotation guiding part which has a predetermined curvature to guide rotation of the body. The body has a straw insertion hole which is defined therein at a predetermined location to have a predetermined diameter in a manner such that a straw can be inserted therethrough. The body further has an advertisement surface which has a predetermined area in a manner such that an advertising design, letters, and so forth can be printed or an attachment can be affixed thereon.

0) US2014054332A – EASY POUR SPOUT

48) Family number: 55882310 (US2014054332A) © PatBase

Title: EASY POUR SPOUT

Priority: US20120692743P 20120824 US20130973455 20130822 WO2013US56144 20130822

Family:

Publication number	Publication date	Application number	Application date
CN104684813 A	20150603	CN201380049513	20130822
EP2888172 A1	20150701	EP20130830659	20130822
EP2888172 A4	20160323	EP20130830659	20130822
JP2015526353 T2	20150910	JP20150528647T	20130822
US2014054332 AA	20140227	US20130973455	20130822
US9254945 BB	20160209	US20130973455	20130822
WO14031832 A1	20140227	WO2013US56144	20130822

Probable Assignee: STOLLE MACHINERY CO LLC

Assignee(s):(std)**:** STOLLE MACHINERY CO LLC

Inventor(s):(std)**:** CARSTENS AARON E ; DAVIDSON JASON A ; MCCLUNG JAMES A

Agent(s): PARRY SIMON JAMES; MARUYAMA AND CO; ECKERT SEAMANS CHERIN AND MELLOTT LLC; GRANT E; JOHN P; COFFIELD GRANT E ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9)**:** B65D17/00 B65D17/32 B65D17/40 B65D47/10 (Advanced/Invention)

CPC: B65D47/106 B65D17/165 B65D2517/0014 B65D2517/0062 B65D2517/0089

US class: 1/1 220/270 222/541.9

Classification Explorer

Cited documents: WO9822356 A1, WO09153827 A1, USD653125 S1, USD612747 S1, USD612724 S1, USD600116 S1, USD570228 S1, USD338156 S1, US8998028 BB, US7975884 BB, US7748563 BB, US7594585 BA, US6793087 BB, US6761281 BB, US6405889 BA, US6234336 BA, US6164480 A, US5964366 A, US5934498 A, US5711448 A, US5683006 A, US5456378 A, US5415313 A, US5011037 A, US4399925 A, US4289251 A, US4205760 A, US4061243 A, US3967752 A, US338156 A, US2013126529 AA, US2013037542 AA, US2012031056 AA, US2010294771 AA, US2010258562 AA, US2010025402 AA, US2009200306 AA, US2008197618 AA, US2008011786 AA, US2007039961 AA, US2004195240 AA, NL1023297 C1, EP2038178 B1,

Forward Citations: USD762114, USD750488, USD749415, US9446879, US9233784, US2013118133,

Abstract:
Source: US2014054332A A can end is provided, which includes a center panel having a radius, a tab fastened to the center panel, and a scoreline defining a tear panel in the end panel. The tab is operable to sever the scoreline and open the tear panel to provide an opening in the can end. The tear panel includes an enlarged portion extending outwardly toward the center panel radius, thereby enlarging the opening. The enlarged portion forms an easy pour spout.

0) US2012205378A – CAN END

49) Family number: 51723873 (US2012205378A) © PatBase

Title: CAN END

Priority: US20110026599 20110214 WO2012US24969 20120214

Family:

Publication number	Publication date	Application number	Application date
EP2675717 A1	20131225	EP20120706381	20120214
US2012205378 AA	20120816	US20110026599	20110214
US8783495 BB	20140722	US20110026599	20110214
WO12112487 A1	20120823	WO2012US24969	20120214

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** FORREST RANDALL G ; REXAM BEVERAGE CAN CO

Assignee(s): REXAM BEVERAGE CAN COMPANY

Inventor(s):(std)**:** FORREST RANDALL G

Agent(s): LANE CATHAL MICHAEL; UNGARETTI AND HARRIS LLP; KLOBUCHAR PETER M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/32 B65D17/34 (Advanced/Invention)

CPC: B65D17/24 B65D2517/0016 B65D17/165 B65D2517/0014 B65D2517/0061 B65D2517/0062 B65D2517/007 B65D2517/0074

European class: B65D17/16B2 L65D517/00Y2C L65D517/00Y7A1 L65D517/00Y7A1A L65D517/00Y7B1 L65D517/00Y7C

US class: 220/269 220/619 220/623

Classification Explorer

Cited documents: WO02051710 A1, WO0058161 A1, US7556168 BB, US7000797 BB, US6761281 BB, US6715629 BB, US6575684 BB, US6460723 BB, US6330954 BA, US6164480 A, US6161717 A, US5964366 A, US5715964 A, US5375729 A, US4804721 A, US4372462 A, US4210257 A, US4084721 A, US3967752 A, US3941277 A, US2004099664 AA, US2003111469 AA, US2003080132 AA, US2002113069 AA, US2001002671 AA,

Forward Citations: USD762114, USD751920, USD751919, USD750488, USD749415, USD731887, USD727725, USD720238, USD715647, USD715144, USD693698, US9580203, US9446879, US9403628, US9233784, US9033175, EP3071491,

Abstract:
Source: US2012205378A A can end for a beverage container has a circumferential curl positioned about a longitudinal axis, a wall extending downwardly from the curl, a strengthening member joined to the wall, and a center panel joined to the strengthening member and extending radially inwardly relative to longitudinal axis. A rivet is located at a center position of the center panel. A frangible score has terminal ends located on a common side of the rivet. The terminal ends are separated by a non−frangible hinge segment. A displaceable tear panel is defined by the frangible score and the non−frangible hinge segment. A non−detachable tab has a nose and a lift end. The nose overlies a portion of the displaceable tear panel. A deboss groove is located on the public side of the center panel and extends downwardly in a direction towards the product side. The deboss groove is located adjacent the score line.

0) US2011226771A – CONTAINER ASSEMBLY WITH STRAINER

50) Family number: 49584759 (US2011226771A) © PatBase

Title: CONTAINER ASSEMBLY WITH STRAINER

Priority: US20100314746P 20100317 US20100360633P 20100701 US20110050446 20110317 US20110187247 20110720

Family:

Publication number	Publication date	Application number	Application date
US2011226771 AA	20110922	US20110050446	20110317
US2011272417 AA	20111110	US20110187247	20110720

Probable Assignee: SILGAN CONTAINERS LLC

Assignee(s):(std)**:** SILGAN CONTAINERS LLC

Inventor(s):(std)**:** HOLSTINE ROWDY H ; HU JIANWEN ; MANNE STEVEN J ; SNYDER THOMAS J ; WOOD DAVID G

International class (IPC 8–9)**:** B23P19/00 B65D17/34 B65D8/00 (Advanced/Invention)

CPC: B65D17/502 B21D51/26 B65D5/302 B65D2231/025 B65D2517/0049 Y10T29/49826 B29C49/4273

European class: B21D51/26 B65D17/50A1 B65D5/30B1 L65D231/02B L65D517/00Y6A

US class: 220/270 220/600 29/428 29/428S

Classification Explorer

Cited documents: USD533452 S1, USD532298 S1, USD530610 S1, USD513452 S1, USD318777 S1, USD315307 S1, USD254482 S1, US737014 A, US7222746 BB, US7150380 BB, US7004345 BB, US6959832 BA, US6718867 BB, US6669046 BA, US6648163 BB, US6578726 BA, US6364169 BA, US6298771 BA, US6202542 BA, US5975368 A, US5911334 A, US5897036 A, US5845801 A, US5725120 A, US5706721 A, US5688544 A, US5445291 A, US5344662 A, US5219100 A, US5125529 A, US5059319 A, US4955513 A, US4735335 A, US4693399 A, US4331255 A, US4284200 A, US4274563 A, US4267937 A, US4240568 A, US4143272 A, US3990615 A, US3642499 A, US3272395 A, US3248016 A, US3217949 A, US3154225 A, US2973234 A, US2964047 A, US2106453 A, US2010127001 AA, US2009261099 AA, US2009001079 AA, US2008041892 AA, US2008023503 AA, US2007145082 AA, US2006191940 AA, US2006151503 AA, US2003151503 AA, US1767001 A, US1679543 A, US138846 A,

Forward Citations: WO14059452, WO14027180, WO13173014, WO13010875, USD745417, USD723672, USD690609, US9382034, US9360233, US8978922, ITVE20120016, EP2664555, CH706030,

Abstract:
Source: US2011226771A A container assembly includes a can, a can end, and a sheet. The can has an open end and an internal volume. The can end is fastened to the open end of the can, and has a first opening and a second opening. The sheet forms a closure to the first and second openings of the can end when the container assembly is in a closed configuration. The sheet is fastened to the can end around the perimeter of the sheet, and is also fastened to the can end proximate to the center of the sheet.

0) US5728415A – PRIZE–CONTAINING BEVERAGE CAN

51) Family number: 20408908 (US5728415A) © PatBase

Title: Prize–containing beverage can

Priority: US19950504753 19950719 WO1996US11519 19960711

Family:

Publication number	Publication date	Application number	Application date
AR002881 A1	19980429	AR19960337526	19960718
AR002881 A1	19980429	AR19960103642	19960718
AT185762 E	19991115	AT19960924421T	19960711
AU199664882 A1	19970218	AU19960064882	19960711
AU693383 B2	19980625	AU19960064882	19960711
CA2226992 AA	19980113	CA19962226992	19960711
CA2226992 C	20020917	CA19962226992	19960711
CN1075999 C	20011212	CN19961095600	19960711
CN1190940 A	19980819	CN19961095600	19960711
DE69604807 D1	19991125	DE19966004807	19960711
DE69604807 T2	20000518	DE19966004807T	19960711
EP0839112 A1	19980506	EP19960924421	19960711
EP0839112 B1	19991020	EP19960924421	19960711
ES2137714 T3	19991216	ES19960924421T	19960711
HK1018036 A1	20020524	HK19980112679	19981202
KR19990029061 A	19990415	KR19980700365	19980117
MX9800505 A1	19980531	MX19980000505	19960711
US5728415 A	19980317	US19950504753	19950719
WO9703894 A1	19970206	WO1996US11519	19960711
ZA9606156 A	19970204	ZA19960006156	19960719

Probable Assignee: COCA COLA CO

Assignee(s):(std)**:** COCA COLA CO ; THE COCA COLA COMPANY

Assignee(s): TROSKA GEORG ; THE COCA COLA CO ; THE COCA COLA CO ATLANTA

Inventor(s):(std)**:** GEORG TROSKA ; TROSKA GEORG

Agent(s): PHILLIPS ORMONDE FITZPATRICK; SIM AND MCBURNEY

Designated states: AT AU BE CA CH CN DE DK ES FI FR GB GR IE IT KR LI LU MC MX NL PT SE

International class (IPC 8–9): B65B61/20 B65D1/12 B65D17/28 B65D75/54 B65D77/24 (Advanced/Invention); B65D17/28 B65D77/24 (Advanced/Non–invention); B65D17/28 B65D77/24 (Core/Invention)

International class (IPC 1–7): B65B61/20 B65D B65D1/12 B65D17/28 B65D35/00 B65D75/54 B65D77/24

CPC: B65D17/165 B65D77/24 B65D2517/0052

European class: B65D17/16B2 B65D77/24 L65D517/00Y6B

US class: 206/217 206/457 206/459.1 426/112 426/115 426/123 426/131 426/392 426/394 426/397

Classification Explorer

Cited documents: WO9500414 A1, WO8901750 A1, US5482158 A, US5439103 A, US5172827 A, US5099232 A, US5056681 A, US5056659 A, US5046631 A, US4923084 A, US4923083 A, US4911320 A, US4892187 A, US4826034 A, US4728001 A, US4709829 A, US4690294 A, US4537324 A, US4356927 A, US4305521 A, US4228913 A, US4109817 A, US3656654 A, GB2237789 A1, GB2217677 A1, EP0482776 A1, EP0444385 A1, EP0079673 A2, EP0078789 A2,

Forward Citations:

WO04101377, US8638232, US8508381, US8493229, US8376161, US7772986, US7516869, US7097069, US6880208, US6298990, US6247612, US6123189, US5924596, US2010265086, US2008111685, US2007014898, US2005123657, US2005026533, DE102014017320, CN104555009, AU2004238398,

Abstract:
Source: US5728415A A container assembly for housing liquid products and a prize therein which may be distributed with non−prize bearing containers comprising: a can for containing the liquid product in an interior chamber thereof, and a prize−holding subassembly positioned within the interior chamber for retaining a prize therein. The prize holding subassembly includes a tether for supporting the prize assembly. The tether includes a hair−pin shaped spring portion defining legs, and foot portions extending from those legs. A proximal end of the tether on one of the foot portions engages a gate on the underside of the can closure, and compresses the spring portion into a cocked, position. When the closure is opened, the gate releases the proximal end of the tether so that it may pop up through the open end of the can for gripping by the consumer. A distal end of the tether on the other end of the tether supports a prize container which is manually removable from the can with the tether.

0) US2013134065A – WING SHAPED BEVERAGE CAN PULL TAB

52) Family number: 53855604 (US2013134065A) © PatBase

Title: WING SHAPED BEVERAGE CAN PULL TAB

Priority: US20110305097 20111128 US20130467506F 20130919 WO2012IB56729 20121126 US20150534472F 20150729

Family:

Publication number	Publication date	Application number	Application date
AU2012345554 AA	20130606	AU20120345554	20121126
AU2012345554 BB	20161006	AU20120345554	20121126
CA2853746 AA	20140428	CA20122853746	20121126
CL2014001315 A1	20141010	CL20140001315	20140519
CN103958359 A	20140730	CN201280057825	20121126
CO6950459 A2	20140520	CO20140100023	20140509
EP2750981 A1	20140709	EP20120812386	20121126
GT201400103 A	20160629	GT20140000103	20140527
IL232056 A0	20140528	IL20140232056	20140410
IN04298DN2014 A	20150220	IN2014DN04298	20140527
JP2015504029 T2	20150205	JP20140542987T	20121126
JP6097304 B2	20170315	JP20140542987T	20121126
KR20140099239 A	20140811	KR20147013373	20121126
MX2014006331 A1	20150217	MX20140006331	20121126
NZ623043 A	20160129	NZ20120623043	20121126
RU2558345 C1	20150727	RU20140116411	20121126
SG11201401117X A	20140627	SG20141101117	20121126
TH143454 A	20151012	TH20141002441	20121126
US2013134065 AA	20130530	US20110305097	20111128
US8695245 BB	20140415	US20110305097	20111128
USD739728 S1	20150929	US20130467506F	20130919
USD781707 S1	20170321	US20150534472F	20150729
WO13080117 A1	20130606	WO2012IB56729	20121126
ZA201402582 A	20151125	ZA20140002582	20121126

Probable Assignee: WINGTAB LLC

Assignee(s):(std)**:** CHRISTOPHER SCHORRE ; SCHORRE CHRISTOPHER ; SCHORRE CHRISTOPHER P ; WINGTAB LLC

Inventor(s):(std)**:** CHRISTOPHER SCHORRE ; SCHORRE CHRISTOPHER ; SCHORRE CHRISTOPHER P

Agent(s): ADAMS PLUCK; RIDOUT AND MAYBEE LLP; ESTUDIO CAREY LTDA; MAURICIO JARAMILLO CAMPUZANO; FUGL CHARLOTTE VALENTIN; KITA AOYAMA INT PATENT BUREAU; GENE; PIERSON IP PLLC; PIERSON EUGENE

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D B65D17/32 B65D17/34 B65D17/347 B65D17/353 B65D25/20 B65D90/00 G09F3/02 (Advanced/Invention); B65D17/34 (Core/Invention); B65D (Subclass/Invention)

CPC: B65D17/165 B65D2517/0014 B65D2517/0053

US class: 206/459.5 220/269 220/272 40/307 D9/438

Locarno class: 09/07

Classification Explorer

Cited documents: WO04062828 A1, WO04062828, USD759481 S1, USD739728 S1, USD721271 S1, USD625184 S1, USD556036 S1, USD535877 S1, USD489773 S1, USD474967 S1, USD454307 S1, USD441005 S1, USD385493 S1, US8931656 BB, US8695245 BB, US8146758 BA, US5975327 A, US5799815 A, US5316166 A, US3967752 A, US3822496 A, US3349949 A, US2870935 A, US2013134065 AA, US2012273492 AA, US2010193519 AA, US2010193519, US2006196875 AA, US2005258175 AA, US2005045637 AA, JPS59133441 U1, JP59133441 U1, JP59133441 U, JP59133441 B1, JP59133441 A2, JP59 U, JP55153329 U, JP55153329 U, JP5089231 U, JP5089231 U, JP5040132 U, JP5040132 U, JP49099665 U, JP49099665 U, JP4060835 U, JP4060835 U, JP3014455 B2, JP3014455 B1, JP3014455 A2, JP3, JP2002128087 A2, JP2002128087, JP2000219236 A2, JP2000219236,

Forward Citations: WO16025482, WO09051081, USD781707, USD739728, USD721271, US8875926, US2013240535, CN105416764,

Abstract:
Source: US2013134065A A wing shaped beverage can pull tab that is wide and tall enough to accommodate advertisements, logos, slogans, contest announcements, graphics, website addresses, etchings, or other marketing, promotional or informational messages targeting the consumer of the beverage. The wing shaped can pull tab can be detached from the can and stored in a pocket without causing injury because of its smooth round edges and compactness. The wing shaped can pull tab is large enough that it does not fall into the can when detached and create injury or choking hazard. The wing shaped can pull tab has a U shaped lift end that accommodates the insertion of a finger to lift the tab to actuate the opening of a can more easily. The contoured U shaped lift end of the wing shaped can pull tab also accommodates the septum of the nose to allow consumption of the beverage from the can without having to tilt the head too far back.

0) US2002050493A – CAN WITH PEELABLY BONDED CLOSURE

53) Family number: 28200465 (US2002050493A) © PatBase

Title: Can with peelably bonded closure

Priority: US19990247999 19990210 US20000603004 20000626 US20010905310 20010713 US20020150683 20020517 WO2001CA00954 20010626 WO2002CA01076 20020715

Family:

Publication number	Publication date	Application number	Application date
AU2001268880 AA	20020108	AU20010268880	20010626
AU2002317644 AA	20030129	AU20020317644	20020715
BRPI0111965 A	20030701	BR2001PI11965	20010626
CA2412518 AA	20021217	CA20012412518	20010626
CA2453552 AA	20040113	CA20022453552	20020715
EP1294613 A1	20030326	EP20010947084	20010626
JP2004501838 T2	20040122	JP20020505271T	20010626
US2002050493 AA	20020502	US20010905310	20010713
US2003062370 AA	20030403	US20020150683	20020517
WO0200512 A1	20020103	WO2001CA00954	20010626
WO03006329 A2	20030123	WO2002CA01076	20020715
WO03006329 A3	20030410	WO2002CA01076	20020715

Probable Assignee: ALCAN INT LTD

Assignee(s):(std)**:** FURNEAUX ROBIN C ; HAMSTRA PETER ; MOULTON JAMES D ; SCOTT TOM E ; SMITH CHRISTOPHER ROBERT ; ALCAN INT LTD ; BALL MELVILLE DOUGLAS

Assignee(s): ALCAN INT ; CITICORP NORTH AMERICA INC ; ALCAN INTERNATIONAL LIMITED ; NOVELIS CORP ; NOVELIS INC

Inventor(s):(std)**:** FURNEAUX ROBIN C ; HAMSTRA PETER ; BALL MELVILLE DOUGLAS ; MOULTON JAMES D ; SCOTT TOM E ; SMITH CHRISTOPHER ROBERT

Inventor(s): TOM E SCOTT ; PETER HAMSTRA ; ROBIN C FURNEAUX ; CHRISTOPHER ROBERT SMITH ; JAMES D MOULTON ; MELVILLE DOUGLAS BALL

Agent(s): KIRBY EADES GALE BAKER

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

International class (IPC 8–9): B65D17/50 B65D21/02 B65D77/20 B65D8/02 (Advanced/Invention)

International class (IPC 1–7): B65D17/50 B65D21/02 B65D41/00 B65D77/20 B65D8/02

CPC: B65D17/502 B65D2517/0013 B65D2517/0056 B65D2517/0062 B65D2517/5008 B65D2517/5032 B65D2517/5054 B65D2517/5083

European class: B65D17/50A1 L65D517/00Y2B L65D517/00Y6Z L65D517/00Y7A1A L65D517/50M10B L65D517/50M2 L65D517/50P1B1 L65D517/50Q5

US class: 220/359.2 220/359.200P 220/359.4 220/359.400S

Classification Explorer

Cited documents: WO0200512 A1, US5829623 A, US5752614 A, US5725120 A, US5692633 A, US5069355 A, US4680917 A, US4650088 A, US4324343 A, US4176760 A, US4165015 A, US3889844 A, US3547305 A, US3312368 A, US2002050493 AA, GB2244254 A1, GB2067159 A1, DE8228681 U, DE2948069 C2,

Forward Citations: WO07045385, WO06061411, WO06061411, WO06053457, WO06053457, WO05019047, WO05019047, WO05005277, WO04035400, WO03051725, WO03016155, WO03006329, WO03006329, USD672235, USD658980, US9540137, US9517866, US8973780,

US8931656, US8875936, US8833585, US8807374, US8746489, US8708188, US8534490, US8336726, US8336725, US8328492, US8240501, US8240498, US8123451, US8104319, US8052005, US8011527, US7918359, US7644833, US7556168, US7350392, US7224580, US7174762, US7004345, US6772900, US2015298831, US2013206766, US2013161324, US2013008910, US2011233227, US2011215099, US2011127268, US2011100854, US2010294768, US2009269169, US2009266824, US2009200302, US2009179033, US2009173737, US2009039091, US2008257900, US2008110887, US2008050207, US2007262079, US2007068943, US2006238965, US2006214430, US2006151503, US2006096994, US2004211780, US2004076721, US2004065663, US2003062370, MY138331, KR100984710, JP2008522828, JP2008213945, JP2007502751, FR2873276, EP1834885, EP1819501, EP1638860, EP1425225, EA8460, EA008460, CH702587, AU2004266755, AU2004255572, AU2004255572,

Abstract:
Source: US2002050493A A metal can for holding a carbonated or otherwise pressurized beverage or the like, having a rigid metal lid formed with an eccentrically disposed, upwardly projecting frustoconical annular flange defining an aperture of average diameter between about 0.625 inch and about 1 inch, and a flexible metal foil closure extending over the aperture and peelably bonded by a heat seal to the sloping outer surface of the flange.

0) US2016228938A – CAN END PRODUCTION

54) Family number: 58753636 (US2016228938A) © PatBase

Title: CAN END PRODUCTION

Priority: EP20130185408 20130920 WO2014EP69735 20140916

Family:

Publication number	Publication date	Application number	Application date
AR097712 AA	20160413	AR2014P103489	20140919
AU2014323166 AA	20150326	AU20140323166	20140916
CA2924726 AA	20160318	CA20142924726	20140916
CN105555431 A	20160504	CN201480051598	20140916
CO16091901 A2	20160510	CO20160091901	20160412
CO7600662 A2	20160510	CO20160091901	20160412
DE602013007564 D1	20160630	DE201360007564T	20130920
EP2851140 A1	20150325	EP20130185408	20130920
EP2851140 B1	20160518	EP20130185408	20130920
ES2586705 T3	20161018	ES20130185408T	20130920
HU030495 T2	20170529	HU20130185408T	20130920
JP2016531758 T2	20161013	JP20160543382T	20140916
MX2016003488 A1	20160906	MX20160003488	20140916
US2016228938 AA	20160811	US20140022774	20140916
WO15040032 A1	20150326	WO2014EP69735	20140916

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC ; GAILLY NOE JACQUES FRANCOIS

Assignee(s): CROWN PACKAGING TECHNOLOGY INC ALSIP

Inventor(s):(std)**:** GAILLY NOE JACQUES FRANCOIS ; NOE JACQUES FRANCOIS GAILLY

Agent(s): MARKS AND CLERK AUSTRALIA; FB RICE; MARKS AND CLERK; JOSE ANDRES RINCON USCATEGUI; MARKS AND CLERK LUXEMBOURG LLP; LIND ROBERT; CARPINTERO MARIO

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D22/22 B21D51/38 B21D51/44 (Advanced/Invention)

CPC: B21D51/44 B21D22/22 B21D51/38

US class: 413/8

Classification Explorer

Cited documents: WO0160546 A1, US6223931 BA, US5823040 A, EP2353746 A1, EP0518613 A1, DE29906170 U1, CN85104434 A, CN101060948 A,

Abstract:
Source: US2016228938A A method of making a can end by forming a can end shell in a shell press; and converting the shell into a can end. The step of forming the can end shell comprises pressing sheet metal into an end shell with a bead feature in the radially outer circumference of its centre panel. In a subsequent can end conversion operation material from the bead feature is used to set final geometry of the converted can end.

0) US4564119A – ALUMINUM CAN END

55) Family number: 4939622 (US4564119A) © PatBase

Title:	Aluminum can end
Priority:	US19840679383 19841207

Family:

Publication number	Publication date	Application number	Application date
US4564119 A	19860114	US19840679383	19841207

Probable Assignee:	NIPPON LIGHT METAL CO
Assignee(s):(std):	NIPPON LIGHT METAL CO
Assignee(s):	NIPPON LIGHT METAL CO LTD
Inventor(s):(std):	KOHMURA SHIGERU ; SAITOH HISAO ; SAITOH SHIGENORI ; SUGIYAMA KEIICHI ; TSUGE MITSUO
International class (IPC 8–9):	B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)
International class (IPC 1–7):	B65D17/34
CPC:	B65D17/165
European class:	B65D17/16B2
US class:	220/270
Classification Explorer	
Cited documents:	US4403710 A, US3980201 A,
Forward Citations:	WO14150673, USD751922, US8789721, US6666933, US5683006, US5405039, US2015034658, US2009200321, US2006029358, EP0262767, EP0261776, CN105492330,

Abstract:
Source: US4564119A The can end is formed with a circular severing score for severing the area defined thereby from the can end by pulling a manipulating tab secured within the area defined by the score at a position adjacent thereto. In order to increase the pressure resisting strength against the internal pressure caused by the content in the can, the can end is made from a thin aluminum alloy sheet having the yield strength in the range of 24–29 kgf/mm2 as well as the elongation equal to or greater than 6 percent, while the aperture rate defined by the ratio of the area formed within the score with respect to the total area of the can end is made at least equal to or greater than 60 percent so that the pressure resisting strength is kept substantially at least 5 kgf/cm2. In order to more advantageously maintain the high pressure resisting strength of the can, score is located at a position spaced from the inner periphery of the bottom of the frustoconical portion at least a distance equal to or greater than 1 mm inwardly of the area of the can end, to make the inner radius of curvature of the corner formed around the inner periphery of the bottom of the frustoconical portion equal to or less than 0.5 mm, and to make the taper angle of the frustoconical portion of the can end equal to or less than 10 DEG. An auxiliary score having a score residual smaller than that of the score for severing the area defined thereby from the can end may be formed outwardly or inwardly of the score for severing. The score residual of the can end may be preferably increased from the thinnest portion adjacent to the position where the tab is provided while a plurality of elongated ridges or grooves may be formed within the area defined by the score substantially perpendicular to the line passing through the tab and the center of the can end in order to avoid rapid severing of the area defined by the score from the can end so as to prevent spilling of the content out of the can when the can end is being opened. All these measures are effective to most advantageously enhance the pressure resisting strength of the can end.

0) US2014263329A – EASY ACCESS OPENING TAB FOR A CONTAINER END CLO...

56) Family number: 57414894 (US2014263329A) © PatBase

Title: EASY ACCESS OPENING TAB FOR A CONTAINER END CLOSURE

Priority: US20130838478 20130315 WO2014US18860 20140227

Family:

Publication number	Publication date	Application number	Application date
AU2014238112 AA	20140925	AU20140238112	20140227
AU2014238112 BB	20160929	AU20140238112	20140227
CA2900636 AA	20150807	CA20142900636	20140227
CL2015002629 A1	20160415	CL20150002629	20150911
CN105073589 A	20151118	CN201480016018	20140227
EP2969818 A1	20160120	EP20140770051	20140227
EP2969818 A4	20161130	EP20140770051	20140227
GT201500271 A	20170104	GT20150000271	20150910
MX2015013266 A1	20151211	MX20150013266	20140227
RU2015144277 A	20170424	RU20150144277	20140227
US2014263329 AA	20140918	US20130838478	20130315
US9033174 BB	20150519	US20130838478	20130315
WO14149484 A1	20140925	WO2014US18860	20140227

Probable Assignee: BALL CORP

Assignee(s):(std): BALL CORP

Assignee(s): CHASTEEN HOWARD C ; JACOBER MARK A

Inventor(s):(std): CHASTEEN HOWARD C ; JACOBER MARK A

Inventor(s): MARK A JACOBER ; HOWARD C CHASTEEN

Agent(s): MADDERNS PATENT AND TRADE MARK ATTORNEYS; SMART AND BIGGAR; JOHANSSON AND LANGLOIS LTDA; EISENFUEHR SPEISER; SHERIDAN ROSS PC; PEARSON KENDRIA E

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/34 B65D43/26 (Advanced/Invention); B65D43/26 (Advanced/Non–invention)

CPC: B65D17/165 B65D43/26 B65D2517/0014 B65D2517/0073 B65D2517/0062

US class: 220/269 220/270 413/25

Classification Explorer

Cited documents: WO11107558 A1, USD612724 S1, USD602776 S1, USD600116 S1, USD579771 S1, USD419873 S1, USD337521 S1, USD265463 S1, US8196767 BB, US8177092 BB, US7942285 BB, US7926675 BB, US7909196 BB, US7891519 BB, US7617945 BB, US7594585 BA, US7168586 BB, US6164480 A, US6138856 A, US6074736 A, US5813811 A, US5813561 A, US5711448 A, US5680952 A, US5655678 A, US5590993 A, US5335808 A, US5224618 A, US5131555 A, US5129541 A, US4994009 A, US4930658 A, US4530631 A, US4524879 A, US4465204 A, US4266688 A, US4257529 A, US4105134 A, US4093102 A, US4084721 A, US4051976 A, US4030631 A, US4024981 A, US4015744 A, US3986633 A, US3938696 A, US3625392 A, US3554400 A, US3250425 A, US2013043248 AA, US2012193361 AA, US2011308202 AA, US2011253719 AA, US2011139782 AA, US2010326281 AA, US2008197132 AA, US2008099480 AA, US2007108209 AA, US2007108208 AA, US2005284869 AA, US2005224497 AA, US2004056032 AA, US2002108954 AA, JP8000580 U, JP5075935 U1, JP5075935 U, JP2002362553 A2, JP2002145263 A2, JP2000159229 A2,

JP10059362 A2, EP1919786 A1, EP0381888 A1,

Forward Citations: USD762114, USD750488, USD749415, US9446879, US9233784, US2016031613, US2013118133,

Abstract:
Source: US2014263329A An end closure for food and beverage containers is provided. The end closure comprises a central panel portion having a protuberance for facilitating access to and manipulation of a pull tab. Before the food or beverage container is pressurized, the protuberance is substantially flat to improve stacking and conveying of the end closure. After the food or beverage container is filled and pressurized, the protuberance selectively deflects and lifts a tail portion of the pull tab to facilitate access.

0) US2009039091A – CAN END WITH COUNTERSINK

57) Family number: 42940431 (US2009039091A) © PatBase

Title: CAN END WITH COUNTERSINK

Priority: EP20080797461 20080808 US20070837195 20070810 WO2008US72594 20080808

Family:

Publication number	Publication date	Application number	Application date
AT548276 E	20120315	AT20080797461T	20080808
BRPI0816205 A2	20150414	BR2008PI16205	20080808
DE602008013998 D1	20120503	DE200860013998T	20080808
EP2195247 A1	20100616	EP20080797461	20080808
EP2195247 B1	20120307	EP20080797461	20080808
ES2381413 T3	20120528	ES20080797461T	20080808
US2009039091 AA	20090212	US20070837195	20070810
US8011527 BB	20110906	US20070837195	20070810
WO09023555 A1	20090219	WO2008US72594	20080808

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** FORREST RANDALL G ; REXAM BEVERAGE CAN CO ; TURNER TIMOTHY L

Assignee(s): REXAM BEVERAGE CAN CO CHICAGO ; REXAM BEVERAGE CAN COMPANY

Inventor(s):(std)**:** TURNER TIMOTHY L ; FORREST RANDALL G

Inventor(s): FORREST RANDALL G PARK RIDGE ; RANDALL G FORREST ; TIMOTHY L TURNER ; TURNER TIMOTHY L PORT CHARLOTTE

Agent(s): WAGNER AND GEYER PARTNERSCHAFT MBB PATENT U RECHTSANWAELTE; LANE CATHAL MICHAEL; UNGARETTI AND HARRIS LLP,INTELLECTUAL PROPERTY GROUP – PATENTS; UNGARETTI AND HARRIS LLP; KLOBUCHAR PETER M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D1/42 B65D17/00 B65D6/02 B65D6/28 B65D6/30 B65D6/34 B65D8/04 (Advanced/Invention); B65D17/00 B65D6/00 (Core/Invention)

CPC: Y10S220/906 B65D17/08 B65D17/165

European class: B65D17/08 B65D17/16B2

US class: 220/610 220/623 220/641 220/643 220/646 220/648 220/651 220/654 220/906

Classification Explorer

Cited documents: WO9834743 A1, WO9637414 A1, WO03016155 A1, WO0243895 A1, WO02057148 A1, WO02057137 A2, WO0200512 A1, WO0141948 A2, US7370774 BB, US7174762 BB, US7100789 BB, US7036348 BB, US7004345 BB, US6935826 BB, US6877941 BB, US6848875 BB, US6835826 BB, US6772900 BB, US6748789 BB, US6736283 BA, US6702142 BB, US6561004 BA, US6516968 BB, US6499622 BA, US6460723 BB, US6436283 BA, US6419110 BA, US6234377 BA, US6234337 BA, US6089072 A, US6065634 A, US6024239 A, US5964366 A, US5950858 A, US5823730 A, US5645189 A, US5346087 A, US5174706 A, US5149238 A, US5143504 A, US5105977 A, US5084721 A, US5069355 A, US5046637 A, US4991735 A, US4832223 A, US4809861 A, US4804106 A, US4722215 A, US4704887 A, US4685849 A, US4680917 A, US4641761 A, US4577774 A, US4571978 A, US4448322 A, US4434641 A, US4324343 A, US4262815 A, US4217843 A, US4116361 A, US4093102 A, US4084721 A, US4055134 A, US4031837 A, US3990376 A, US3945334 A, US3941277 A, US3905513 A, US3871314 A, US3868919 A, US3853080 A, US3837524 A, US3765352 A, US3705563 A, US3525455 A, US3434623 A, US3186583 A, US318583 A, US2006096994 AA, US2005252922 AA, US2005247717 AA, US2005115976 AA, US2005029269 AA, US2005006395 AA, US2005006388 AA, US2004247717 AA,

US2004238546 AA, US2004211780 AA, US2004206764 AA, US2004200838 AA, US2004140312 AA, US2004074911 AA, US2004065663 AA, US2003173367 AA, US2003121924 AA, US2002158071 AA, US2002050493 AA, US2001037668 AA, GB422052 A, EP0340955 A1, DE8228681 U, DE8228681, DE2554264 A1, DE2303943 A1, AU107340 A1,

Forward Citations: USD762114, USD750488, USD749415, USD731887, USD727725, USD715647, USD715144, US9446879, US9403628, US9233784, US9162795, US8950619,

Abstract:
Source: US2009039091A A can end for a two−piece beverage can is described. The can end has a center panel positioned about a vertical center axis. The center panel has a means for opening the can end located on a public side. A reinforcing bead surrounds the center panel. The reinforcing bead has an inner curved portion having a radius of curvature located radially inwardly from an outer curved portion having a radius of curvature. The radius of curvature of the outer curved portion is greater than the radius of curvature of the inner curved portion.

0) US3952912A – CONTAINER WITH ATTACHED CLOSURE

58) Family number: 6653037 (US3952912A) © PatBase

Title: Container with attached closure

Priority: US19720231124 19720302 US19740514069 19741011 US19760744162 19761122 US19740515444 19741017 US19760712839 19760809 US19760717993 19760826

Family:

Publication number	Publication date	Application number	Application date
US3843011 A	19741022	US19720231124	19720302
US3952912 A	19760427	US19740514069	19741011
US3977578 A	19760831	US19740515444	19741017
US4051976 A	19771004	US19760712839	19760809
US4062471 A	19771213	US19760717993	19760826
US4084721 A	19780418	US19760744162	19761122

Probable Assignee: CONTINENTAL GROUP

Assignee(s):(std)**:** CONTINENTAL GROUP ; PERRY DECEASED WALTER MERTON ; PERRY EXECUTRIX BY ELIZABETH D ; PERRY W ; PERRY WALTER MERTON

Assignee(s): PERRY W US ; THE CONTINENTAL GROUP INC

Inventor(s):(std)**:** PERRY WALTER MERTON ; PERRY W ; PERRY EXECUTRIX BY ELIZABETH D ; PERRY DECEASED WALTER MERTON

Inventor(s): PERRY W US

International class (IPC 8–9): B21D51/38 B21D51/44 B65D17/32 B65D17/50 (Advanced/Invention); B21D51/38 B65D17/00 B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/00 B65D17/16 B65D17/24 B65D17/32 B65D41/32 B65D43/02 B65D47/10

CPC: B21D51/383 B65D17/16 B65D17/165 B65D17/166 B65D17/503 B65D17/506 B65D2517/0011 B65D2517/0013 B65D2517/0014 B65D2517/0017 B65D2517/002 B65D2517/0062 B65D2517/007 B65D2517/0071 B65D2517/0098 B65D2517/5008 B65D2517/5029 B65D2517/5048 B65D2517/5056 B65D2517/5081 B65D2517/5091 B65D17/161

European class: B21D51/38B B65D17/16 B65D17/16B B65D17/16B2 B65D17/16B2B B65D17/50A2 B65D17/50B L65D517/00Y2A L65D517/00Y2B L65D517/00Y2C L65D517/00Y2E L65D517/00Y2Z L65D517/00Y7A1A L65D517/00Y7B1 L65D517/00Y7B2 L65D517/00Y9 L65D517/50M10A1 L65D517/50M2 L65D517/50P1A1 L65D517/50P2 L65D517/50Q1B L65D517/50Q99

US class: 220/260 220/265 220/268 220/269 220/277 220/359.2 220/47 222/541 222/541.9 222/561

Classification Explorer

Cited documents: US3977561 A, US3967753 A, US3967752 A, US3856184 A, US3843011 A, US3836038 A, US3744667 A, US3744666 A, US3738526 A, US3703979 A, US3446389 A, US2723778 A, US2590437 A, US2320484 A, US2274752 A, US2261117 A, US117510 A,

Forward Citations: WO9714621, WO8907556, WO16132287, WO14003586, WO14003585, WO13018110, WO12112487, WO11117772, WO09051409, WO09051409, WO08104392, WO08051099, WO07147542, WO07056844, WO06010688, WO04113186, WO02070165, WO0183303, WO0146025, WO0105663, WO0105663, WO0069735, WO0056613, WO0037323, USRE42485, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD691039, USD582274, USD582273, USD533452, USD532691, USD532298, USD530610, USD513452, USD509426, USD507485, USD476889, US9592928, US9566634, US9540137, US9446879, US9359108, US9267705, US9233784, US9163653, US9033174, US8998015, US8973780, US8950619, US8875936, US8870012, US8783495, US8733576, US8627979, US8616399, US8567158, US8556104, US8371467, US8328492, US8215513, US8196767, US8104319, US8080770, US8052005, US8011527, US7975884, US7950542, US7812292, US7748563, US7644833, US7594585, US7556168, US7378625, US7350392, US7174762, US7165696, US7112771, US7051896, US7004345, US7000797, US6772900, US6761281, US6748789, US6715629, US6405889, US6354453, US6330954, US6260728, US6244455, US6234336, US6161717,

US6129230, US6079583, US6024239, US5967726, US5931331, US5860553, US5806757, US5715964, US5711448, US5692636, US5566850, US5555992, US5402921, US5375729, US5335808, US5219257, US5129541, US5085348, US5065882, US5064087, US5007231, US4901880, US4801038, US4624386, US4585140, US4446985, US4411370, US4387827, US4372462, US4322016, US4184607, US4155480, US4141464, US4078695, US4078694, US4054228, US4030631, US4024981, US4024980, US3997075, US3977578, US3977561, US3972445, US3967753, US3967752, US3967750, US3935961, US2015353229, US2015176622, US2012043325, US2012031056, US2010269345, US2010213194, US2010200590, US2010163560, US2010065568, US2009269169, US2009266824, US2009206083, US2009090716, US2008257900, US2008073343, US2008050207, US2008011786, US2007284368, US2007108208, US2007108198, US2007108197, US2007108196, US2007102425, US2006163253, US2006096994, US2005199619, US2005199617, US2005051552, US2005006388, US2004211786, US2004211780, US2004200838, US2004065663, US2003213803, US2003080132, US2003042258, US2003038134, US2003001788, JP57196640, JP56056734, JP5414074, JP2011500467, JP2003517974, GB2156772, GB2125762, FR2957898, EP2969799, EP2546159, EP1964784, EP0621195, EP0592550, EP0160626, EP0160626, EP0090809, EP0033449, EP0000091, EA017452, EA015059, DE2707064, AU761490,

Abstract:
Source: US3952912A Improved easy opening means for containers. Especially adapted to those used for liquids, including carbonated beverages, and permitting drinking from the container or pouring out contents. An important feature is attachment of closure to container after opening to avoid litter. Another feature is lift tab for easy opening, and with closure sealed by either a frangible adhesive sealant or by membrane sealing means. Lift tab initiates rupture of sealant, and then is pushed below container top with means to hold tab below opening so there is no interference when drinking from the can. Another closure has a small end for initial pressure release, and then whole closure hinges inwardly. Still another means comprises a slide gate with frangible membrane for sealing and for very easy opening. Optionally a pressure release button is provided to release the internal pressure before pulling the slide gate. An improved forming method for making the opening smaller than the closure where the closure is cut from the ductile metal top material. Partial use of score lines is included. Container top may be of ductile metal or of plastic for some of the designs. Primary objectives are the elimination of separate closure device that would cause litter, closure easier to open than heretofore, low cost, and no danger of a piece coming loose inside container.

0) US2009261101A – VENTABLE RESEALING CAN END CLOSURE

59) Family number: 43872709 (US2009261101A) © PatBase

Title: VENTABLE RESEALING CAN END CLOSURE

Priority: US20080106877 20080421

Family:

Publication number	Publication date	Application number	Application date
US2009261101 AA	20091022	US20080106877	20080421
US8336728 BB	20121225	US20080106877	20080421
WO09131994 A1	20091029	WO2009US41242	20090421

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** FORREST RANDALL G ; REXAM BEVERAGE CAN CO ; TURNER TIMOTHY L

Assignee(s): REXAM BEVERAGE CAN COMPANY

Inventor(s):(std)**:** FORREST RANDALL G ; TURNER TIMOTHY L

Agent(s): UNGARETTI AND HARRIS LLP,INTELLECTUAL PROPERTY GROUP – PATENTS; UNGARETTI AND HARRIS LLP INTELLECTUAL PROPERTY GROUP PATENTS; UNGARETTI AND HARRIS LLP; KLOBUCHAR PETER M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/34 B65D17/50 B65D41/06 B65D51/16 B65D53/02 (Advanced/Invention); B65D17/00 B65D17/28 B65D51/16 B65D53/00 (Core/Invention)

CPC: B65D17/506 B65D2205/00 B65D2517/002 B65D2517/0038

European class: B65D17/50B L65D205/00 L65D517/00Y2Z L65D517/00Y5C

US class: 220/203.01 220/203.010S 220/254.8 220/270 220/303 220/304 220/366.1 220/367.1 220/367.100P 220/378 220/906

Classification Explorer

Cited documents: US7171840 BB, US7051896 BB, US6959830 BA, US684799 A, US634742 A, US6193096 BA, US6015054 A, US5704510 A, US5688544 A, US5443175 A, US5322177 A, US5249703 A, US4632271 A, US4202462 A, US4043474 A, US3868038 A, US3844443 A, US3704677 A, US3672547 A, US3477608 A, US3219004 A, US3021976 A, US2908417 A, US2661863 A, US253075 A, US2363693 A, US2337616 A, US2241793 A, US2007062952 AA, US2006011633 AA, US2005029264 AA, US2004159665 AA, US1746926 A, US1598870 A, US1598098 A, GB2180521 A1,

Forward Citations: USD734154, USD725472, USD725471, USD702553, USD697407, USD697404, USD696946, USD696116, USD688949, USD686079, USD686078, US9637269, US9580203, US9550485, US9272819, US9033175, US8985371, US8844761, US2016257290,

Abstract:
Source: US2009261101A A can end for a container has a metallic main portion and a polymeric separable cap. The metallic main portion is positioned about a longitudinal axis and has a curl defining a radially outer perimeter of the can end. A center panel is joined to the curl. A dispensing aperture is in the center panel, and a plurality of projections extend radially inwardly into the dispensing aperture. The polymeric separable cap is in the dispensing aperture and has a plurality of angled channels. The channels have an entry portion opposite a terminal end and a vent region therebetween.

0) US2004123444A – METHOD OF MANUFACTURING AN ALUMINUM DESIGN TAB ...

60) Family number: 24116113 (US2004123444A) © PatBase

Title: METHOD OF MANUFACTURING AN ALUMINUM DESIGN TAB END FOR A BEVERAGE CAN

Priority: KR20010021328 20010420 WO2002KR00731 20020420

Family:

Publication number	Publication date	Application number	Application date
AU2002256928 AA	20021105	AU20020256928	20020420
AU2002256928 BB	20060713	AU20020256928	20020420
BRPI0208993 A	20040427	BR2002PI08993	20020420
CA2443578 AA	20031014	CA20022443578	20020420
CA2443578 C	20090120	CA20022443578	20020420
CN1253312 C	20060426	CN20028008511	20020420
CN1503733 A	20040609	CN20028008511	20020420
EP1395432 A1	20040310	EP20020726513	20020420
EP1395432 A4	20070221	EP20020726513	20020420
IN01046MN2003 A	20050429	IN2003MN01046	20031112
IN209690 B	20070921	IN2003MN01046	20031112
JP2004533326 T2	20041104	JP20020583184T	20020420
KR100414528 B1	20040107	KR20010021328	20010420
KR20010068082 A	20010713	KR20010021328	20010420
US2004123444 AA	20040701	US20030475209	20031017
US6854947 BB	20050215	US20030475209	20031017
VN6287 A1	20070525	VN20030000927	20020420
WO02085628 A1	20021031	WO2002KR00731	20020420
ZA200307946 A	20040608	ZA20030007946	20031013

Probable Assignee: 3C TECHNOLOGIES LTD

Assignee(s):(std)**:** 3C TECHNOLOGIES LTD ; C SOLUTION INC ; CHUNG HYUNG DONG ; SOLUTION INC C ; LEE DO HEE ; LG ELECTRONICS INC

Assignee(s): 3C TECHNOLOGIES LIMITED

Inventor(s):(std)**:** CHUNG HYUNG DONG ; DO HEE LEE ; HYUNG DONG LEE ; JUNG HYEONG DONG ; LEE DO HEE

Inventor(s): LEE HYUNG DONG

Agent(s): ALLENS PATENT AND TRADE MARK ATTORNEYS; RICHES MCKENZIE AND HERBERT LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW

International class (IPC 8–9)**:** B05C1/00 B21D51/38 B21D51/44 B41F17/00 B41F17/14 B41F17/30 B41F19/00 B41M1/00 B65D17/34 B65D17/347 B65D17/353 B65D17/50 B65D51/24 (Advanced/Invention); B41F17/30 (Advanced/Non–invention); B05C1/00 B21D51/38 B41F17/00 B41F17/08 B41F19/00 B41M1/00 B65D17/00 B65D17/28 B65D51/24 (Core/Invention)

International class (IPC 1–7)**:** B21D B21D51/38 B21D51/44 B23P25/00 B41F B41F17/14 B41F17/30 B65D B65D17/34 B65D17/347 B65D17/353 B65D17/50

CPC: Y10T29/49885 Y10T29/49982 B21D51/383 B65D17/16

European class: B21D51/38B B65D17/16

US class: 29/458 29/527.2 413/12 413/18 413/25 413/3

Classification Explorer

Cited documents: WO0047487 A1, US6105806 A, US5799815 A, US5511920 A, US5359766 A, US5191695 A, US4762579 A, US4380129 A, KR200216365 Y1, KR200216365, KR20000072711 A, KR20000006983 A,

Forward Citations: WO14152858, USD625184, US9637267, US9340368, US9278776, US9259913, US9187221, US9186924, US9007413, US8844747, US8146768, US7748557, US2015027327, US2011226636, US2010193519, US2008083754, US2006140746, US2005258175, US2005045637, CN105531191, CN105026169, CN103108710, CN103108710, CN101869953,

Abstract:
Source: US2004123444A The present invention relates to a method for manufacturing a design tab end of a beverage can, in which a base color is painted on an aluminum tab coil before forming a tab, and a design is printed on the surface of the tab coil on which the base color has been painted, thereby making the color of the tab gorgeous and raising the value of the product. The present invention is comprised of the steps of, painting a base color on an exact surface position of an aluminum tab coil that is to be formed to a tab through the tab forming process; printing a design on the surface of the tab coil on which the base color has been painted, according to a printing degree; coating a varnish for preventing a deterioration of printing quality during forming and distribution of a product, on the surface of the tab coil on which the design has been printed; arranging a pitch of the tab coil so as to determine an exact position of the tab coil that has been coated with the varnish; press–forming the arranged tab coil with a conversion press; and stacking the tab formed by the press–forming to join the tab on a center of a shell that has been fed previously.

0) US2016023801A – VENTED BEVERAGE CAN END HAVING AN ANTI–TENSION ...

61) Family number: 57467520 (US2016023801A) © PatBase

Title: VENTED BEVERAGE CAN END HAVING AN ANTI–TENSION SCORE

Priority: US20130781416P 20130314 US20140773882 20140310 WO2014US22502 20140310

Family:

Publication number	Publication date	Application number	Application date
CN105228911 A	20160106	CN201480027504	20140310
EP2969798 A1	20160120	EP20140716106	20140310
US2016023801 AA	20160128	US20140773882	20140310
WO14150180 A1	20140925	WO2014US22502	20140310

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING TECHNOLOGY INC

Inventor(s):(std)**:** KEANE BRENDAN

Agent(s): LIND ROBERT; FULLMER HAROLD H

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/32 (Advanced/Invention)

CPC: B65D2517/0082 B65D2517/008 B65D17/165 B65D17/24 B65D2517/0014 B65D2517/0062 B65D2517/0076 B65D2517/0095

US class: 220/271

Classification Explorer

Cited documents: WO9602432 A1, WO11053776 A1, US85714501, US6354453 BA, US6079583 A, US5555992 A, US5011037 A, US4289251 A, US3977561 A, US2013126529 AA, US2013037542 AA, US2012082529 AA, US2012031056 AA, US2004099664 AA, US2003075544 AA, GB2116934 B2, CN101394999 A, CN101128361 A, CA2777915 AA, AU8729282 A1,

Forward Citations: WO17019269, USD787952,

Abstract:
Source: US2016023801A A beverage can end for seaming onto a can body may include a peripheral wall, a center panel (26), a tab (attached to the center panel by a rivet (28), a tear panel (60), a main reference line (Rm), a transverse reference line (R1), and a score (30). The end includes an anti–fracture score (40) proximate a vent score (70). The center panel includes a recess (27), in which the main score, an antifracture score, and (optionally) the anti–tension score (50) are located. The score is configured such that lifting the tab from its horizontal rest position to an intermediate position ruptures the main score portion to pivot the tear panel main portion about the hinge (70) and a second lifting operation or twisting operation of the tab ruptures the main score extension (34).

0) US2006289549A – EDGE–TEARING TAMPER–EVIDENT CONTAINER

62) Family number: 34029940 (US2006289549A) © PatBase

Title: EDGE–TEARING TAMPER–EVIDENT CONTAINER

Priority: CA20062565664 20061026 US20050166308 20050624 US20090321254 20090120 US20060496215 20060731 US20080065907P 20080215 US20090371888 20090216 US20090512817 20090730

Family:

Publication number	Publication date	Application number	Application date
AU2006236072 AA	20080214	AU20060236072	20061117
AU2006236072 BB	20100325	AU20060236072	20061117
CA2565664 AA	20080131	CA20062565664	20061026
CA2565664 C	20120417	CA20062565664	20061026
DE602005010066 D1	20081113	DE200560010066T	20051031
EP1736417 A1	20061227	EP20050256721	20051031
EP1736417 B1	20081001	EP20050256721	20051031
EP1884478 A1	20080206	EP20060255708	20061106
MXPA06013396 A1	20081008	MX2006PA13396	20061117
US2006289549 AA	20061228	US20060496215	20060731
US2009223619 AA	20090910	US20090321254	20090120
US2009321463 AA	20091231	US20090512817	20090730
US7568589 BB	20090804	US20060496215	20060731
US7712626 BB	20100511	US20090512817	20090730
US7992743 BB	20110809	US20090321254	20090120
US8251249 BA	20120828	US20090371888	20090216

Probable Assignee: PACTIV PACKAGING INC

Assignee(s):(std)**:** PWP IND ; VOVAN TERRY

Assignee(s): UNION BANK OF CALIFORNIA NA ; PWP IND INC ; UNION BANK OF CALIFORNIA NA ADMINISTRATIVE AGENT A ; UNION BANK OF CALIFORNIA NA ADMINISTRATIVE AGENT AS ; PWP IND (CALIFORNIA CORPORATION) ; PWP IND CALIFORNIA CORP ; PWP IND CALIFORNIA CORPORATION ; BANK OF NEW YORK MELLON COLLATERAL AGENT AS ; PACTIV PACKAGING INC

Inventor(s):(std)**:** VOVAN TERRY

Inventor(s): TERRY VOVAN

Agent(s): PHILLIPS ORMONDE FITZPATRICK; SMART AND BIGGAR; HEDLEY NICHOLAS JAMES MATTHEW ET AL; LEON D ROSEN FREILICH HORNBAKER AND ROSEN; KNOBBE MARTENS OLSON AND BEAR LLP; LEON D; BAKER BOTTS LLP

Designated states: AL BA DE FR GB HR IT MK YU

International class(IPC 8–9)**:** B31B49/02 B32B37/00 B65D17/347 B65D17/353 B65D21/02 B65D39/00 B65D41/32 B65D43/02 B65D43/14 B65D43/16 B65D50/02 B65D51/00 B65D55/06 B65D6/28 B65D8/18 (Advanced/Invention); B31B49/00 B32B37/00 B65D17/28 B65D39/00 B65D41/32 B65D43/00 B65D43/02 B65D43/14 B65D50/00 B65D51/00 B65D55/02 (Core/Invention)

CPC: B65D43/021 B65D55/024 B65D2101/0092 B65D2543/00092 B65D2543/00101 B65D2543/00203 B65D2543/00222 B65D2543/00296 B65D2543/00351 B65D2543/0049 B65D2543/00509 B65D2543/00546 B65D2543/0062 B65D2543/00648 B65D2543/00685 B65D2543/00731 B65D2543/00768 B65D2543/00796 B65D2543/00842 B65D2543/0099

European class: B65D43/02S3D B65D55/02F L65D101/00A7 L65D543/00Y10B2 L65D543/00Y1F2C L65D543/00Y1F2D L65D543/00Y1F4C3B L65D543/00Y1G L65D543/00Y1M6 L65D543/00Y20D L65D543/00Y2D L65D543/00Y8D1 L65D543/00Y8D1C L65D543/00Y8D3N L65D543/00Y8S1B2 L65D543/00Y8S1B8 L65D543/00Y8S1D2 L65D543/00Y8S3B10 L65D543/00Y8S3B2 L65D543/00Y8S3D2

US class:

156/69 156/69P 206/228 206/369 206/461 220/23.83 220/23.86 220/266 220/377 220/4.21 220/4.22 220/4.23 220/4.24 220/4.26 220/4.27 220/500 220/520 220/521 220/523 220/751 220/752 220/767 220/789 220/791 220/796 220/826 220/836 220/839 220/839S 220/840 493/52 493/52S

Classification Explorer

Cited documents: WO05009857 A1, USRE36729 E, USD352000 S1, US7311218 BB, US7311218 B1, US7243813 BB, US7243813 B1, US7207457 BB, US7118003 BB, US7118003 B1, US7097058 BB, US7097058 B1, US7073680 BB, US7073680 B1, US7004341 BB, US6926165 BB, US6926165 B1, US6772901 BB, US6772901 B1, US6604645 BA, US6572909 BA, US6564958 BA, US6279774 BA, US6257435 BA, US6168044 BA, US6168044 B1, US6135304 A, US6116501 A, US6000570 A, US5979690 A, US5931332 A, US5897011 A, US5883771 A, US5875913 A, US5842593 A, US5683771 A, US5607075 A, US5604645 A, US5573134 A, US5545375 A, US5528814 A, US5511679 A, US5507406 A, US5507405 A, US5421473 A, US5307948 A, US5287959 A, US5249694 A, US5219087 A, US5219074 A, US5170905 A, US5133470 A, US5129531 A, US5115934 A, US5111954 A, US5111953 A, US5052574 A, US5040695 A, US5027969 A, US5007231 A, US5002198 A, US4998622 A, US4966292 A, US4930656 A, US4890758 A, US4881656 A, US4765463 A, US4759463 A, US4742935 A, US4627550 A, US4535889 A, US4434907 A, US4433793 A, US4113136 A, US4091930 A, US4006839 A, US3773207 A, US36729 A, US3572579 A, US352000 A, US2009206082 AA, US2009057313 AA, US2009021026 AA, US2008185383 AA, US2008163265 AA, US2008021026 AA, US2008006632 AA, US2008000904 AA, US2007202221 AA, US2007196541 AA, US2007138180 AA, US2007138046 AA, US2007108210 AA, US2007062948 AA, US2007012710 AA, US2006289549 AA, US2006289541 AA, US2006278652 AA, US2006266750 AA, US2006261070 AA, US2006255054 AA, US2006201946 AA, US2006163265 AA, US2006060578 AA, US2006006632 AA, US2006000904 AA, US2004134910 AA, US2003160051 AA, US2003052133 AA, GB2257118 A1, FR2819496 A1, FR2691952 A1, EP0752374 A1, DE7816353 U, DE7816353, DE4418935 A1, DE29914659 U1, DE29819718 U1, DE1999083197,

Forward Citations: WO16054297, WO08156921, USD776974, USD746678, USD742222, USD697795, USD686064, USD675517, USD673447, USD646563, USD645737, USD645339, US9656785, US9624009, US9580219, US9546018, US9493277, US9475621, US9409683, US9365331, US9352886, US9278786, US9187209, US9132942, US9120595, US9102446, US9051095, US9016503, US8944270, US8939307, US8939287, US8925755, US8851315, US8833589, US8789695, US8640914, US8608008, US8523000, US8371468, US8360262, US8322555, US8272526, US8251249, US8251242, US8215485, US8146766, US8127961, US8123064, US8083089, US8056750, US8028851, US7992743, US7832586, US7712626, US7681732, US2016355303, US2015329249, US2015136777, US2015060455, US2015060454, US2014224824, US2014106048, US2014061971, US2013233746, US2013220855, US2013043247, US2012241456, US2012005994, US2010224630, US2010181323, US2010155402, US2010102074, US2009321463, US2009223619, US2009211941, US2009206082, US2009120937, US2009090712, US2008277397, US2008000904, US2007045317, GB2497112, GB2483133, GB2483133, EP1801026,

Abstract:
Source: US2006289549A A food container formed from plastic, can be loaded with food and then closed by a clerk, and thereafter cannot be opened without tearing apart first sides (24, 26) of the base (12) and lid (16). The container is formed by a single sheet of plastic that forms a base and lid with second sides (20, 22) that are latched together and with adjacent first sides that are joined by a joint line (30) in the plastic that is creased and that has slits (40). At the joint line, the lid has a projecting lid tab (32) and the base has a projecting base tab (36). A person grasps both tabs, and lifts only the lid tab to tear apart the first sides of the base and lid along the joint line (30). Thereafter, the lid can be easily closed and reopened on the base.

0) US2014028039A – DISPOSABLE FINGER TONGS FOR HANDLING A FOOD PRO...

63) Family number: 55704776 (US2014028039A) © PatBase

Title: DISPOSABLE FINGER TONGS FOR HANDLING A FOOD PRODUCT

Priority: US20120741052P 20120711 US20120741657P 20120725 US20130939070 20130710 US20120796556P 20121113 US20130848579P 20130107 US20150706426 20150507

Family:

Publication number	Publication date	Application number	Application date
US2014028039 AA	20140130	US20130939070	20130710
US2016157647 AA	20160609	US20150706426	20150507
US9033383 BB	20150519	US20130939070	20130710
US9578982 BB	20170228	US20150706426	20150507
WO16179427 A1	20161110	WO2016US31045	20160505

Probable Assignee: RAMPERSAD KENRICK

Assignee(s):(std)**:** RAMPERSAD KENRICK

Inventor(s):(std)**:** RAMPERSAD KENRICK

Agent(s): ALFRED M; JOHN F; WALKER ALFRED M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A41D1/00 A41D13/08 A41D31/02 A47D13/08 A47G21/00 A47G21/10 A47J43/28 A61F13/10 B25B9/02 B65G7/12 (Advanced/Invention)

CPC: A47G21/001 A47J43/283 A61F13/105 A47J43/28 B25B9/02 A47G21/10 A41D2400/52 A41D13/087

US class: 294/25 294/99.2

Classification Explorer

Cited documents: WOUS31045, WO16179427 A1, WO12117248 A2, WO11081402 A2, US9033383 BB, US8261938 BB, US7165270 BB, US7117536 BB, US6425136 BA, US6243868 BA, US5848928 A, US567087 A, US5359840 A, US5280661 A, US4938515 A, US4677697 A, US4476588 A, US4424595 A, US4188055 A, US4038787 A, US3407927 A, US3331626 A, US2244072 A, US2014109284 AA, US2014028039 AA, US2008000011 AA, US2007131706 AA, US2007118947 AA, US2006108240 AA, US2005138736 AA, US2002043810 AA, US1235199 A,

Forward Citations: WO16179427, US9578982,

Abstract:
Source: US2014028039A A combination finger fold holder tong and surface texturizing set includes a set of tongs with finger pockets, whereby the pockets are movable towards and away from each other for grasping an article of food; plus a plurality of adhesively adherable sticker substrates having a first texture imparted side and an opposite adhesive bearing side with a release liner, whereby the texture containing adhesively adherable sticker is placed upon the food engaging surface for manual grasping of articles of food.

0) US5964366A – CAN END HAVING SCORE GROOVE WITH THICKENED RESI...

64) Family number: 29612353 (US5964366A) © PatBase

Title: Can end having score groove with thickened residual area

Priority: US19960754232 19961120 US19970857812 19970516 US19980087530 19980529 WO1997US19654 19971024

Family:

Publication number	Publication date	Application number	Application date
AU199851552 A1	19980610	AU19980051552	19971024
US5964366 A	19991012	US19980087530	19980529
WO9822356 A1	19980528	WO1997US19654	19971024

Probable Assignee: MILLERCOORS LLC

Assignee(s):(std): COORS BREWING CO

Assignee(s): COORS BREWING COMPANY ; COORS GLOBAL PROPERTIES INC ; MILLERCOORS LLC

Inventor(s):(std): HIDALGO DENNIS K ; HURST ROBERT L

Inventor(s): ROBERT L HURST ; DENNIS K HIDALGO

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CH CN CU CZ DE DK EE ES FI FR GB GE GH GR HU IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG UZ VN ZW

International class (IPC 8–9): B65D17/32 B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/32 B65D17/34

CPC: B65D17/165 B65D17/24 B65D2517/0014 B65D2517/0062 B65D2517/007 B65D2517/0071

European class: B65D17/16B2 B65D17/24 L65D517/00Y2C L65D517/00Y7A1A L65D517/00Y7B1 L65D517/00Y7B2

US class: 220/269 220/270

Classification Explorer

Cited documents: US5715964 A, US5711448 A, US5655678 A, US5555992 A, US5456378 A, US5385254 A, US5375729 A, US5129541 A, US5064087 A, US4939665 A, US4901880 A, US4804104 A, US4733793 A, US4465204 A, US4363419 A, US4320850 A, US4318489 A, US4313545 A, US4266685 A, US4210257 A, US4205760 A, US4184607 A, US4175670 A, US4024981 A, US3967752 A, US3941277 A, US3583348 A, US3424337 A, US3291336 A, US3259265 A, EP0704382 A2,

Forward Citations: WO16001562, WO14031832, USRE42485, USD762114, USD750488, USD749415, USD727725, USD715144, USD650278, USD650277, USD650276, USD507485, USD476889, US9561888, US9540137, US9446879, US9254945, US9233784, US8973780, US8875936, US8783495, US8627979, US8328492, US8196767, US8109406, US8104319, US8052005, US8011527, US7909196, US7594585, US7556168, US7165696, US6405889, US6234336, US2012228296, US2011272406, US2010065568, US2009269169, US2009266824, US2009039091, US2008257900, US2008099480, US2008050207, US2005252917, US2005006388, US2004200838, FR3022895, EP1857370, EP1857196, EP1353852, EP1135300, CN104684813,

Abstract:
Source: US5964366A A can end for a two–piece beverage can including a score panel defined by an arcuate score line which comprises a score groove and a score residual portion. In order to control the opening speed of the score panel, the thickness of the score residual is varied along the score line. A thickened score residual area or areas may generally be located opposite the rivet area of the can end. The remainder of the score residual may be formed having a relatively smaller thickness, thus allowing opening of the end to be accomplished without the need for excessive force.

0) WO07007102A2 – FANCIFUL ENDS FOR CANS EXTREMITES FANTAISIE PO...

65) Family number: 32258761 (WO07007102A2) © PatBase

Title: FANCIFUL ENDS FOR CANS

Priority: GB20050014343 20050713 GB20060009568 20050713 GB20060009568 20060513

Family:

Publication number	Publication date	Application number	Application date
GB200514343 A0	20050817	GB20050014343	20050713
GB200609568 A0	20060621	GB20060009568	20050713
GB2428659 A1	20070207	GB20050014343	20050713
GB2428659 B2	20071121	GB20050014343	20050713
GB2428668 A1	20070207	GB20060009568	20050713
GB2428668 B2	20080723	GB20060009568	20050713
WO07007102 A2	20070118	WO2006GB02583	20060712
WO07007102 A3	20070503	WO2006GB02583	20060712

Probable Assignee: REXAM BEVERAGE CAN EUROPE LTD

Assignee(s):(std)**:** BONNER ANN ; REXAM BEVERAGE CAN EUROP LTD ; REXAM BEVERAGE CAN EUROPE LTD

Assignee(s): REXAM BEVERAGE CAN EUROPE LIMITED

Inventor(s):(std)**:** BONNER ANN

Inventor(s): ANN BONNER

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/38 B21D51/44 B65D17/28 B65D17/32 B65D17/34 B65D51/24 (Advanced/Invention); B21D51/38 B65D17/28 B65D51/24 (Core/Invention)

CPC: B21D51/38 B65D17/165 B65D2203/00 B65D2517/0014 B65D2517/0052 B65D81/365 B21D51/44 B65D17/16 B21D51/443 B65D51/245

European class: B21D51/38 B21D51/44 B21D51/44B B65D17/16 B65D17/16B2 B65D51/24F B65D81/36D L65D203/00 L65D517/00Y2C L65D517/00Y6B

Classification Explorer

Cited documents: WO9958407 A1, WO9909853 A2, WO05021392 A1, WO0168460 A2, US6659833 BA, US6533518 BA, US6053349 A, US2001011431 AA, JP2002128087 A2, GB2347370 A1,

Forward Citations: WO17027802, WO13158771, WO13049313, WO08125238, US9637267, US9340368, US9278776, US9259913, US9187221, US9186924, US2015034649, DE102012209500, CN103946119,

Abstract:
A can is described having a can body comprising a sidewall and a base and defining an interior region for containing a product. The can includes an end having a center panel. A printing is applied over a substantial area extent of the center panel. In one embodiment, the printing comprising an illustration of head and facial features of a character. In preferred embodiments, the end may further comprise a scored portion in the center panel for defining an opening in the end and a manually manipulable tab secured to the end. The tab forms the nose of the character. The character may include the face and head of a real person, or, alternatively, may depict a fictional character or a cartoon character. Other embodiments are described in the printing takes the form of a sports scene with a ball such as a soccer or golf ball printed within a score portion defining a pour panel.

0) US2005284869A – CAN END

66) Family number: 32524541 (US2005284869A) © PatBase

Title: CAN END

Priority: CA20052510689 20050627 EP20040253845 20040606 EP20040253845 20040626 EP20050105543 20050622

Family:

Publication number	Publication date	Application number	Application date
AT375928 E	20071115	AT20050105543T	20050622
CA2510689 AA	20051226	CA20052510689	20050627
CA2510689 C	20131001	CA20052510689	20050627
DE602005002878 D1	20071129	DE200560002878T	20050622
DE602005002878 T2	20080724	DE200560002878T	20050622
EP1616802 A1	20060118	EP20050105543	20050622
EP1616802 B1	20071017	EP20050105543	20050622
ES2292062 T3	20080301	ES20050105543T	20050622
US2005284869 AA	20051229	US20050166227	20050627
US8177092 BB	20120515	US20050166227	20050627

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING TECHNOLOGY INC ; MILLS GARY H ; MILLS GARY HILAIRE

Assignee(s): DEUTSCHE BANK AG ; DEUTSCHE BANK NEW YORK BRANCH AGENT AG AS ; DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS

Inventor(s):(std)**:** MILLS GARY ; MILLS GARY H ; MILLS GARY HILAIRE

Agent(s): FETHERSTONHAUGH AND CO; VINCENT L RAMIK DILLER RAMIK AND WIGHT; MILES AND STOCKBRIDGE PC; DAVID R; MICHAEL A

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

International class (IPC 8–9)**:** B65D17/00 B65D17/34 B65D17/46 B65D17/52 B65D33/10 B65D43/26 B65D47/24 B65D50/14 B65D51/16 (Advanced/Invention); B65D17/00 B65D17/28 B65D33/06 B65D43/00 B65D47/04 B65D50/00 B65D51/16 (Core/Invention)

International class (IPC 1–7)**:** B65D17/34 B65D43/26 B65D50/14 B65D51/16

CPC: B65D17/163 B65D33/10 B65D47/24 B65D2517/0094 B65D17/165 B65D2517/0092

European class: B65D17/16B1 B65D17/16B2 B65D33/10 B65D47/24 L65D517/00Y8A L65D517/00Y8B

US class: 220/269 220/271 220/272 220/279 220/285

Classification Explorer

Cited documents: US6347720 BA, US5819973 A, US4043479 A, US4030631 A, US4015744 A, US3951299 A, US2894844 A, US2002014489 AA, EP0521642 B1, EP0521642,

Forward Citations: WO13020706, WO11026900, USD762114, USD669781, USD649049, USD647400, USD643718, USD641623, USD641622, USD641239, US9446879, US9359108, US9181007, US9033174, US9016504, US8939308, US7922025, US7721906, US2013240526, US2011056945, US2010163560, US2008173646, US2008067174, US2008067171, FR3021634, EP2878547, EP2557050, CN102625769, CN102625769,

Abstract:
Source: US2005284869A An easy open end for a pressurised food container, having an end panel and a conventional aperture score, surrounding the periphery of an aperture through which the contents of the container may be dispensed. A tab is provided to facilitate easy opening of the aperture. The easy open end also includes a vent score, which is arranged to rupture before the main aperture score, to vent the internal pressure in the container, before the container is opened. The end panel and/or tab also defines a shield to prevent the egress of product from the vent opening, when the vent score is severed.

67) Family number: 8380493 (US5258191A) © PatBase

Title: Vacuum–sealed food container having press–on, pry–off closure

Priority: US19910694149 19910501 US19910694903 19910502 US19930015284 19930208 US19920819462 19920110 US19920820445 19920113 US19940256242 19940701 WO1991US03028 19910502 WO1993US00222 19930108

Family:

Publication number	Publication date	Application number	Application date
AU199179019 A1	19921221	AU19910079019	19910502
AU199335824 A1	19930803	AU19930035824	19930108
AU660614 B2	19950706	AU19910079019	19910502
BRPI9107304 A	19940614	BR1991PI07304	19910502
CA2109097 AA	19931022	CA19912109097	19910502
CA2127693 AA	19940708	CA19932127693	19930108
EP0583240 A1	19940223	EP19910910049	19910502
EP0583240 A4	19941109	EP19910910049	19910502
HU67206 A2	19950228	HU19930002978	19910502
HU9302978 A0	19940128	HU19930002978	19910502
JP7500795 T2	19950126	JP19910509396T	19910502
RU93057880 A	19960610	RU19930057880	19931029
US5258191 A	19931102	US19920820445	19920113
US5341949 A	19940830	US19930015284	19930208
US5443853 A	19950822	US19940256242	19940701
WO9219506 A1	19921112	WO1991US03028	19910502
WO9313990 A1	19930722	WO1993US00222	19930108

Probable Assignee: ANCHOR HOCKING PACKAGING CO

Assignee(s):(std): ANCHOR HOCKING CORP ; ANCHOR HOCKING PACKAGING

Assignee(s): ANCHOR HOCKING PACKAGING CO ; ANCHOR HOCKING PACKAGING CO US ; CITICORP NORTH AMERICA INC ; CROWN CORK AND SEAL TECHNOLOGIES ; DEUTSCHE BANK AG ; CITICORP NORTH AMERICA INC COLLATERAL AGENT AS ; DEUTSCHE BANK NEW YORK BRANCH AGENT AG AS ; CHASE MANHATTAN BANK COLLATERAL AGENT AS ; HAYES THOMAS H ; CROWN PACKAGING TECHNOLOGY INC

Inventor(s):(std): HAYES THOMAS H

Inventor(s): HAYES THOMAS H US ; THOMAS H HAYES

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; MACRAE AND CO

Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CI CM CZ DE DK ES FI FR GA GB GN GR HU IE IT JP KP KR LI LK LU MC MG ML MN MR MW NL NO NZ PL PT RO RU SD SE SK SN SU TD TG UA US

International class (IPC 8–9): B65D41/34 B65D41/48 B65D41/52 B65D43/10 B65D51/14 B65D51/24 B65D81/34 (Advanced/Invention); B65D41/32 B65D51/00 (Core/Invention)

International class (IPC 1–7): B65B41/00 B65B55/00 B65D41/16 B65D41/48 B65D41/52 B65D43/00 B65D43/10 B65D53/04 B65D81/34 B65D85/00 H05B6/00

CPC: B65D41/48 B65D51/145 B65D2101/0023 B65D41/3428 B65D51/24 B65D81/3453 B65D2101/0053 B65D2205/00

European class: B65D41/34C1 B65D41/48 B65D51/14B B65D51/24 B65D81/34M1 L65D101/00A3 L65D101/00A3E L65D205/00

US class: 215/253 215/274 215/321 219/734 426/107 426/113 426/234 426/243 426/401 426/405 426/407

Cited documents: US5078290 A, US5009324 A, US4993572 A, US4942277 A, US4813561 A, US4721218 A, US4694970 A, US4694969 A, US4509654 A, US4478349 A, US4473163 A, US4448345 A, US4390552 A, US4362253 A, US4171084 A, US4129226 A, US4024976 A, US4018353 A, US3940004 A, US3930589 A, US3913771 A, US3866782 A, US3850330 A, US3820678 A, US2517542 A, GB2021530 A1, EP0366617 A2, EP0323812 A2, EP0280065 A1, AU604029 B2, AU604029,

Forward Citations: WO9923007, WO9744262, WO9641751, WO9610522, WO9610522, WO16014825, WO15153952, WO14145569, WO14088781, WO11112285, WO06045196, WO05092730, WO04106174, WO04085257, WO02068285, USD668555, USD626790, USD592954, USD587115, USD584145, US9676504, US9630762, US9611073, US9474397, US9469445, US9445631, US9359117, US9340332, US9334082, US9032698, US9022079, US8998030, US8991632, US8915395, US8910781, US8650839, US8556070, US8458996, US8418870, US8251236, US8210377, US8132600, US8100285, US8100277, US8071004, US7954521, US7886928, US7798359, US7798319, US7789254, US7784629, US7780024, US7766178, US7748525, US7644902, US7571829, US7454884, US7401452, US7231753, US7175039, US7134565, US7131250, US7076929, US7004341, US7003928, US6981601, US6974046, US6823651, US6702133, US6688081, US6375023, US6253940, US5992660, US5875906, US5785198, US5740914, US2014374446, US2014326735, US2013233845, US2011215097, US2011215023, US2011052768, US2011036839, US2010307113, US2010282706, US2010200588, US2010065557, US2009241477, US2009236353, US2009223986, US2009061044, US2009057318, US2007108155, US2007095781, US2007090111, US2006278601, US2006231519, US2006138141, US2006091100, US2006081625, US2005115964, US2004182047, US2004149676, US2004084333, US2003178385, US2003150833, JP5442850, JP2011513150, JP2006526547, FR2897043, ES2187341, EP1857372, EP1732818, EP1633639, EP0949156, DE102005019291, DE102005019291, CN102448842,

Abstract:
Source: US5258191A Easily removable press−on, pry−off closures having movable insert disks in an outer shell are disclosed. Pressing the shell upward to remove it from a container first pries a protrusion inside the shell over a snap rib around the container, then moves the shell upward relative to the disk while the later remains seated on the container, until a disk−lifting projection inside the shell engages the edge of the disk and lifts the disk to break the seal. A tamper evidencing band, if included, is broken before either the shell is pried off or the disk is lifted. The invention can be used in both top load and bottom load embodiments. Also disclosed is a closure with a non−movable disk or integral top and a tamper−evidencing band which is broken by pry−off removal of the closure. Still further, food packages which automatically open when heated in microwave ovens are disclosed. Vacuum−packed food packages having effective head spaces for reducing the times required to retort such packages are also disclosed.

68) Family number: 14989605 (US6202880B) © PatBase

Title: OPENABLE CAN END WITH SURPRISING OPENING PORTION

Priority: DE19951035827 19950926 DE19961039619 19960926 WO1996DE01838 19960926 DE19965005318 19960926

Family:

Publication number	Publication date	Application number	Application date
AT193260 E	20000615	AT19960942246T	19960926
CA2232871 AA	19980324	CA19962232871	19960926
DE19639619 A1	19970327	DE19961039619	19960926
DE59605318 D1	20000629	DE19965005318	19960926
DK0852554 T3	20001030	DK19960942246T	19960926
EP0852554 A1	19980715	EP19960942246	19960926
EP0852554 B1	20000524	EP19960942246	19960926
ES2148822 T3	20001016	ES19960942246T	19960926
GR3034160 T3	20001130	GR20000401855T	20000809
PL183337 B1	20020628	PL19960325974	19960926
PL325974 A1	19980817	PL19960325974	19960926
PT852554 T	20001031	PT19960942246T	19960926
US6202880 BA	20010320	US19980043685	19980706
WO9711892 A1	19970403	WO1996DE01838	19960926

Probable Assignee: SCHMALBACH LUBECA AG

Assignee(s):(std): REICHINGER RICHARD ; SCHMALBACH LUBECA ; STRUBE LUTZ

Assignee(s): SCHMALBACH LUBECA 38112 BRAUNSCHWEIG DE AG ; SCHMALBACH LUBECA AG ; SCHMALBACH LUBECA AG 38112 BRAUNSCHWEIG DE

Inventor(s):(std): STRUBE LUTZ ; REICHINGER RICHARD

Inventor(s): REICHINGER RICHARD LIVERPOOL GB ; STRUBE LUTZ 38162 CREMLINGEN DE ; RICHARD REICHINGER ; LUTZ STRUBE

Agent(s): MARKS AND CLERK

Designated states: AT BE CA CH DE DK ES FI FR GB GR IE IT LI LU MC NL PL PT SE US

International class (IPC 8–9): B65D17/28 B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/28 B65D17/34

CPC: Y10S220/906 B65D17/165 B65D17/163

European class: B65D17/16B1 B65D17/16B2

US class: 220/269 220/906

Classification Explorer

Cited documents: WO9118796 A1, US5695085 A, US5555992 A, US5494184 A, US5397014 A, US5285919 A, US5064087 A, US4872597 A, US4467938 A, US4253582 A, US4141464 A, US4036398 A, US3773209 A, GB2029381 A1, FR2256876 A1, AU472462 A1,

Forward Citations: WO13044095, WO11115815, WO10091088, WO0058161, USD762114, USD750488, USD749415, USD727725, USD708516, USD708060, USD625184, US9637267, US9598211, US9446879, US9365334, US9278776, US9233784, US9187221, US9186924, US9181007, US9156585, US9007413, US8939311, US8844747, US8783496, US8146768, US7757887, US6926487, US6926456, US6872913, US6576871, US6575684, US6479787, US6476349, US6455806, US6311860, US5971195, US2014103044, US2011226636, US2010294771, US2010276423, US2010193519, US2004206764, US2003178397, EP1113901, EP1113901,

Abstract:
Source: US6202880B An openable can end for a beverage can of usual type, having a first tear−out portion which seems to be openable, when a lever−type tab is operated. A second tear−out portion is also provided beside or outside the first portion, wherein the second tear−out portion tears out (or breaks in) instead of the expected first tear−out portion. Thus, it is possible to surprise the user upon opening such a beverage can, without impairing the simple and reliable opening of the beverage can.

0) US2002014489A – EASY–OPEN MISTING CONTAINER

69) Family number: 28176356 (US2002014489A) © PatBase

Title: EASY–OPEN MISTING CONTAINER

Priority: US19990294982 19990419

Family:

Publication number	Publication date	Application number	Application date
US2002014489 AA	20020207	US19990294982	19990419
US6375029 BB	20020423	US19990294982	19990419

Probable Assignee: ALCOA USA CORP

Assignee(s):(std): ALCOA INC ; ANTHONY MICHAEL J ; CLARKE ANDREW F ; SMITH EILEEN M

Assignee(s): JPMORGAN CHASE BANK NA ADMINISTRATIVE AGENT AS ; ALCOA USA CORP

Inventor(s):(std): ANTHONY MICHAEL J ; CLARKE ANDREW F ; KURZDORFER GEORGE P ; SMITH EILEEN M

International class (IPC 8–9): B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/34

CPC: Y10S220/906 B65D17/165 B65D2517/0014 B65D2517/0062 B65D2517/0071 B65D2517/0092

European class: B65D17/16B2 L65D517/00Y2C L65D517/00Y7A1A L65D517/00Y7B2 L65D517/00Y8A

US class: 220/271 220/906

Classification Explorer

Cited documents: USD289017 S1, US5967726 A, US5819973 A, US5799815 A, US5738237 A, US5692636 A, US4928845 A, US4901877 A, US4741451 A, US4610156 A, US4530631 A, US4503989 A, US4465204 A, US4205759 A, US4146149 A, US4043479 A, US4030631 A, US4015744 A, US3951299 A, US3690506 A, US3416699 A,

Forward Citations: USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD691039, US9446879, US9233784, US9181007, US8904843, US8646643, US8567158, US8177092, US8109406, US8109405, US7975884, US2013240526, US2012118891, US2010018976, US2008314906, US2008099480, US2008011786, US2005284869, EP1616802, EP1616802,

Abstract:
Source: US2002014489A An improved can end, and method for making a can end, for pressurized beverage containers with a stay on tab. The tab incorporates a raised region with a hole. The raised region is positioned to receive the vapor vented from the can upon initial lifting of the tab. The raised region and hole are sized and shaped to discharge the vapor from the region, through the hole, and into the surrounding environment, appearing as a mist or cloud. Among other configurations, the raised region can be shaped as the top half of a bubble or a crescent, and the opening can be circular or elongated.

0) US5375729A – EASY–OPEN CONTAINER END

70) Family number: 11404995 (US5375729A) © PatBase

Title: EASY–OPEN CONTAINER END

Priority: CA19942121205 19940413 US19930050837 19930421 US19970921273 19970829 US19960603887 19960222 US19940316870 19941003

Family:

Publication number	Publication date	Application number	Application date
AT171134 E	19981015	AT19940105919T	19940416
AU199460513 A1	19941027	AU19940060513	19940419
CA2121205 AA	19941022	CA19942121205	19940413
DE69413286 D1	19981022	DE19946013286	19940416
DE69413286 T2	19990506	DE19946013286T	19940416
EP0621195 A2	19941026	EP19940105919	19940416
EP0621195 A3	19950426	EP19940105919	19940416
EP0621195 B1	19980916	EP19940105919	19940416
JP3578797 B2	20041020	JP19940083382	19940421
JP6321238 A2	19941122	JP19940083382	19940421
TW271425 B	19960301	TW19940103346	19940415
US5375729 A	19941227	US19930050837	19930421
US5692636 A	19971202	US19960603887	19960222
US5860553 A	19990119	US19970921273	19970829
ZA9402546 A	19960513	ZA19940002546	19940413

Probable Assignee: DAYTON RELIABLE TOOL AND MFG CO

Assignee(s):(std)**:** DEITON RIRAIABURU TOOL AND MFG C ; DAYTON RELIABLE TOOL AND MFG CO

Assignee(s): DAYTON RELIABLE TOOL AND MFG CO DAYTON OHIO US ; DEITON RIRAIABURU TOOL AND MFG CO ; DRT MFG CO ; FIFTH THIRD BANK ADMINISTRATIVE AGENT AS ; SCHUBERT JAMES R

Inventor(s):(std)**:** JIEEMUZU AARU SHIYUBAATO ; SCHUBERT JAMES R

Inventor(s): JAMES R SCHUBERT

Agent(s): GRIFFITH HACK; GOWLING LAFLEUR HENDERSON LLP; CHIBA AKIO; SAKUMA SHIGERU; KURITA TADAHIKO; MASUI CHUJI; TOMITA HIROYUKI; SHAMOTO ICHIO; KOBAYASHI YASUSHI

Designated states: AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

International class (IPC 8–9)**:** B21D51/44 B65D17/32 B65D17/34 B65D41/32 (Advanced/Invention); B65D (Subclass/Invention)

International class (IPC 1–7)**:** B21D51/44 B65D17/32 B65D17/34 B65D41/32

CPC: Y10S220/906 B65D17/165 B65D2517/0007 B65D2517/0014 B65D2517/0092

European class: B65D17/16B2 L65D517/00Y1C L65D517/00Y2C L65D517/00Y8A

US class: 220/269 220/271 220/906 413/16 413/17

Classification Explorer

Cited documents: US5692636 A, US5375729 A, US5129541 A, US5064087 A, US4946063 A, US4901880 A, US4503989 A, US4348464 A, US4084721 A, US4030631 A, US4030631, US4024981 A, US4015744 A, US3997076 A, US3870001 A, EP0564725 A1, EP00564725, EP0050713 A1,

Forward Citations: WO9901351, WO9901351, WO9822356, WO15200301, WO14151503, WO04089775, WO03053800, USD762114, USD750488, USD749415, USD731887, USD727725, USD715647, USD715144, USD691039, USD669781, USD649049, USD647400, USD643718, USD641623, USD641622, USD641239, USD424438, USD418414, US9650172, US9580203, US9446879, US9403628, US9248936, US9233784,

US9181007, US9162795, US9051081, US9033175, US8950619, US8939308, US8783495, US8678221, US8567158, US8122747, US7975884, US7165696, US7000797, US6908005, US6761281, US6715629, US6575684, US6405889, US6375029, US6330954, US6296471, US6260728, US6234336, US6164480, US6161717, US6129230, US6079583, US6050440, US6024239, US5988416, US5964366, US5931331, US5860553, US5738237, US5711448, US5692636, US5647499, US2016052668, US2015367984, US2014263332, US2012205378, US2011056945, US2010266732, US2009293572, US2008011786, US2003080132, US2002104842, JP3374747, JP2014148363, JP2012201381, JP11165733, ES2525589, EP2969799, EP1857370, EP1857196, EP1353852, EP1318077, EP1306310, EP0993408, EP0421416,

Abstract:
Source: US5375729A The invention, relating to an easy−open metal container end, places a portion of the metal of the tear panel, in the region where a score stop otherwise would be located, under compression by forming a short coined depression or bead in the tear panel, preferably in the public side, close to the score line at least at the end of the vent region opposite from the inner hook, which is located at the radially inward end of the tear panel score line. During initial opening or venting action, as the rivet is lifted by initial tab motion, separation proceeds along the score line, beneath the nose of the tab. The metal adjacent and in this coined depression tends to move partially underneath the metal on the opposite side of the score line from the coined vent bead. This action provides sufficient disruption or retarding of the score line separation or rupture, during venting, to confine such separation to the vent region until internal pressure is vented. Further separation of the tear panel can proceed under control of continued raising tab motion and resulting opening force. By providing such a coined vent bead, the score stop may be made considerable less deep leaving adequate residual metal along score line 15, or the score stop can be entirely eliminated in some cases, thereby making it possible to achieve consistent and proper venting in ends made of thinner metals, e.g. in the order of 0.009−0.008 inch.

0) US3836038A – EASY–OPEN WALL

71) Family number: 1301246 (US3836038A) © PatBase

Title: EASY–OPEN WALL

Priority: BR19760002984 19760512 US19720293115 19720928 US19740488805 19740715 US19740492033 19740726 US19740506453 19740916 US19730378448 19730712 US19740519992 19741101 US19750592232 19750701 US19750634755 19751124 US19740529461 19741204

Family:

Publication number	Publication date	Application number	Application date
AU197359924 A1	19750327	AU19730059924	19730903
AU197587205 A1	19770609	AU19750087205	19751203
AU472924 B2	19760610	AU19730059924	19730903
AU498737 B2	19790322	AU19750087205	19751203
BR7602984 A	19771116	BR19760002984	19760512
CA1005004 A1	19770208	CA19730179593	19730824
CA1034520 A1	19780711	CA19750240694	19751128
DE2348648 A1	19740404	DE19732348648	19730927
DE2348648 B2	19800221	DE19732348648	19730927
DE2348648 C3	19840830	DE19732348648	19730927
DE2365887 A1	19770224	DE19732365887	19730927
DE2365888 A1	19770224	DE19732365888	19730927
DE2553835 A1	19760610	DE19752553835	19751129
DE2553835 B2	19800214	DE19752553835	19751129
FR2293369 A1	19760702	FR19750036975	19751203
FR2293369 B1	19800411	FR19750036975	19751203
GB1447776 A	19760902	GB19730045131	19730926
GB1540229 A	19790207	GB19750049077	19751128
HK4482 A	19820212	HK19820000044	19820204
IT1060391 A	19820710	IT19750029843	19751201
JP1150186 C3	19830614	JP19750143819	19751202
JP1252429 C3	19850226	JP19730109190	19730928
JP49101193 A2	19740925	JP19730109190	19730928
JP51082188 A2	19760719	JP19750143819	19751202
JP57042544 B4	19820909	JP19750143819	19751202
JP59000417 B4	19840106	JP19730109190	19730928
US3836038 A	19740917	US19720293115	19720928
US3967750 A	19760706	US19750592232	19750701
US3967752 A	19760706	US19750634755	19751124
US3967753 A	19760706	US19740492033	19740726

Probable Assignee: REYNOLDS METALS CO

Assignee(s):(std)**:** REYNOLDS METALS CO

Assignee(s): REYNOLDS METALS CO HENRICO COUNTY VA US ; REYNOLDS METALS CO HENRICO COUNTY VA V ST A ; REYNOLDS METALS CO US ; REYNOLDS METALS COMPANY ; REYNOLDS METALS CY ; CUDZIK DANIEL F ; REINORUZU METARUSU CO

Inventor(s):(std)**:** CUDZIK DANIEL F ; CUDZIK DANIEL FRANK ; DANIERU FURANKU KADOZUITSUKU ; CUDZIK D ; CUDZIK D F

Inventor(s): CUDZIK D US ; DANIERU FURANKU KAZUITSUKU ; FRANK CUDZIK DANIEL ; GODZIK D F ; CUDZIK DANIEL FRANK RICHMOND VA ; CUDZIK DANIEL FRANK RICHMOND VA US ; CUDZIK DANIEL FRANK RICHMOND VA V ST A ; D F CUDZIK ;

DANIEL FRANK CUDZIK

Agent(s): CA

International class (IPC 8–9): B65D17/00 B65D17/32 B65D17/34 B65D17/347 B65D17/353 B65D41/32 (Advanced/Invention); B65D17/00 B65D17/28 B65D41/32 (Core/Invention); B61B (Subclass/Invention)

International class (IPC 1–7): B65D17/00 B65D17/02 B65D17/16 B65D17/18 B65D17/20 B65D17/24 B65D17/32 B65D17/34 B65D41/32

CPC: B65D17/16 B65D17/24 B65D17/165

European class: B65D17/16 B65D17/16B2 B65D17/24

US class: 220/266 220/269 220/270 220/277 220/48 D9/438

Classification Explorer

Cited documents: US3843011 A, US3813000 A, US3749275 A, US3744667 A, US3744666 A, US3730379 A, US3446389 A, US3435977 A, US3401823 A, US3338460 A, US3322296 A, US3289880 A, US3215305 A, US2828883 A, US2085200 A, DE2126933 A1, DE1761153 A, AT283191 B, AT258781 B,

Forward Citations: WO9822356, WO9730902, WO9729960, WO9729960, WO8403080, WO8204026, WO15200301, WO15004965, WO14200098, WO14073350, WO13161021, WO13080117, WO07081349, WO0146025, USRE42485, USD762114, USD750488, USD749415, USD747649, USD747199, USD727725, USD715647, USD715144, USD691039, USD559680, USD507485, USD476889, USD424438, US9649254, US9637269, US9592936, US9533800, US9446879, US9371152, US9321562, US9315290, US9272819, US9254945, US9233784, US9199763, US9016034, US8931660, US8857644, US8844761, US8783495, US8733576, US8727169, US8640905, US8627979, US8567158, US8505765, US8328041, US8313004, US8235244, US8205477, US8196767, US8061544, US7938290, US7743635, US7673768, US7594585, US7513383, US7506779, US7500577, US7500376, US7380684, US7165696, US7152766, US7100789, US7000797, US6935826, US6889862, US6877941, US6848875, US6837093, US6761281, US6666933, US6575684, US6460723, US6408498, US6405889, US6354467, US6354453, US6330954, US6260728, US6234336, US6164480, US6161717, US6138856, US6129230, US6079583, US6065634, US6024239, US5967726, US5964366, US5931331, US5806757, US5749488, US5738237, US5715964, US5711448, US5653355, US5219257, US5190149, US5133473, US5129541, US5007554, US4402421, US4399925, US4387827, US4322016, US4257529, US4253582, US4215794, US4184607, US4150765, US4130074, US4084721, US4062471, US4051976, US4030631, US4024981, US4015744, US4002262, US2014054332, US2013126528, US2012292329, US2012205378, US2011186575, US2010133275, US2010089923, US2009200306, US2008302756, US2008230548, US2007131690, US2007007294, US2006163254, US2006071005, US2006042344, US2005247717, US2005173437, US2005064755, US2005006395, US2004056032, US2003202862, US2003173367, US2003116574, US2003080132, US2002170913, NL7705102, JP8268429, JP60179629, JP55143248, JP54176568, JP4201851, JP2957930, JP2006232306, FR2648113, FR2550767, FR2508417, FR2486495, FR2459181, FR2408530, EP1210273, EP1194337, EP0929450, EP0704382, EP0564725, EP0289022, EP0080775, EP0080775, EP0079673, EP0079673, EP0043786, DE3941239, DE3110770, DE2855037, DE2842449, DE2637420, DE202015002495, DE102012023131, AU705788, AU576900,

Abstract:
Source: US3836038A An easy−open wall is provided for a container and comprises an approximately U−shaped score line in such wall with the score line having a bight and a pair of extensions extending from the bight and terminating in spaced ends having a portion of the wall therebetween. The score line defines a panel which is completely severable from the wall along the bight and along parts of the extensions adjoining the bight while remaining attached at the wall portion to define an opening in the wall. A non−detachable tab is attached substantially flatly against the wall and the tab has a forward portion which overlies part of the panel and has a rear portion. The rear portion is easily grasped and lifted to urge the forward portion against the panel to thereby sever such panel and move it within the container with the wall portion holding the panel securely to the wall.

0) US2004056032A – LARGE OPENING BEVERAGE CONTAINER

72) Family number: 30397221 (US2004056032A) © PatBase

Title: LARGE OPENING BEVERAGE CONTAINER

Priority: US20020412435P 20020919 US20030656421 20030905 WO2003US28975 20030919

Family:

Publication number	Publication date	Application number	Application date
AT384005 E	20080215	AT20030755825T	20030919
AU2003273325 AA	20040408	AU20030273325	20030919
AU2003273325 BB	20081127	AU20030273325	20030919
BRPI0314439 A	20050719	BR2003PI14439	20030919
BRPI0314439 B1	20130528	BR2003PI14439	20030919
CA2496666 AA	20050222	CA20032496666	20030919
CN100396570 C	20080625	CN20038021142	20030919
CN1681711 A	20051012	CN20038021142	20030919
DE60318730 D1	20080306	DE20036018730	20030919
DE60318730 T2	20090115	DE20036018730T	20030919
EP1556287 A1	20050727	EP20030755825	20030919
EP1556287 A4	20060906	EP20030755825	20030919
EP1556287 B1	20080116	EP20030755825	20030919
ES2298559 T3	20080516	ES20030755825T	20030919
MXPA05002940 A1	20050603	MX2005PA02940	20030919
TH27380 B	20100201	TH20031003542	20030919
TH71721 A	20051103	TH20031003542	20030919
US2004056032 AA	20040325	US20030656421	20030905
US6889862 BB	20050510	US20030656421	20030905
WO04026712 A1	20040401	WO2003US28975	20030919

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP ; VAUGHAN JOSEPH S

Assignee(s): BALL 10 LONGS PEAK DRI CORPVEB

Inventor(s):(std)**:** JOSEPH S VAUGHAN ; VAUGHAN JOSEPH ; VAUGHAN JOSEPH S

Inventor(s): JOSEPH VAUGHAN

Agent(s): PHILLIPS ORMONDE FITZPATRICK; GOODWIN MCKAY; PARLEE MCLAWS LLP; GROSSE BOCKHORNI SCHUMACHER; SHERIDAN ROSS PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B65D17/34 (Advanced/Invention); B65D17/34 (Core/Invention)

International class (IPC 1–7): A61B5/00 B65D17/34

CPC: B65D17/165 B65D2517/0007 B65D2517/0014 B65D2517/0028 B65D2517/007 B65D2517/0071

European class: B65D17/16B2 L65D517/00Y1C L65D517/00Y2C L65D517/00Y4A L65D517/00Y7B1 L65D517/00Y7B2

US class: 220/269

Classification Explorer

Cited documents: USD406236 S1, USD352898 S1, USD337521 S1, USD304302 S1, USD300608 S1, USD285661 S1, USD279265 S1, US6405889 BA, US6260728 BA, US6164480 A, US6050440 A, US6024239 A, US5711448 A, US5494184 A, US5129541 A, US5064087 A, US4893725 A, US4681238 A, US4674649 A, US4286728 A, US4276993 A, US4210257 A, US4150765 A, US4148410 A, US4024981 A, US4015744 A, US3967752 A, US3334775 A,

Forward Citations: WO16087268, WO14152235, WO14150205, USD762114, USD751922, USD750488, USD749415, USD731887, USD727725, USD715647, USD715144, USD704555, USD677585, USD677584, USD672663, USD663622, USD663210, USD661204, USD661203, USD658078, USD656042, USD653563, USD653562, USD653126, USD653125, USD653124, USD653123, USD652742, USD652741, USD652740, USD651527, USD651526, USD649887, USD641261, USD638311, USD632190, USD632189, USD632188, USD632187, USD631759, USD626015, USD624438, USD621724, USD620377, USD615877, USD614970, USD614969, USD614049, USD612732, USD607727, USD607330, USD607329, USD606406, USD606405, USD606404, USD606403, USD606402, USD599678, USD599677, USD596958, USD596957, USD596956, USD596955, USD596505, USD596504, USD596503, USD596502, USD596501, USD596500, USD588021, USD588020, USD588019, USD588018, USD588017, USD588016, US9637269, US9580203, US9540137, US9446879, US9403628, US9315290, US9272819, US9248936, US9233784, US9216840, US9181007, US9162795, US9033175, US9033174, US8973780, US8950619, US8844761, US8646643, US8640905, US8141741, US8109406, US8109405, US2009218349, US2009057315, US2008314906, US2008099480, US2007108208, JP2009126523, EP3028952, EP2844573, CN105873829, CN105102332,

Abstract:
Source: US2004056032A The present invention relates to an improved opening end closure which is adapted for interconnection to a beverage container to prevent premature rupturing and detachment of the tear panel from the center panel. More specifically, the present invention includes an improved cent bead, an enlarged score origination loop, and a pull tab with a cut−out portion with one leg longer than the other leg for selectively orienting the direction of force created on the tear panel away from the hinge portion of the tear panel.

0) US2011303672A – FLAP SCORE VENTING OF CAN END

73) Family number: 50099678 (US2011303672A) © PatBase

Title: FLAP SCORE VENTING OF CAN END

Priority: EP20110792880 20110526 US20100796972 20100609 WO2011US38050 20110526

Family:

Publication number	Publication date	Application number	Application date
AU2011264511 AA	20111215	AU20110264511	20110526
AU2011264511 BB	20151210	AU20110264511	20110526
BR112012031527 A2	20161108	BR20121131527	20110526
CA2802053 AA	20121207	CA20112802053	20110526
CN103221314 A	20130724	CN201180039326	20110526
CN103221314 B	20170301	CN201180039326	20110526
DK2580135 T3	20170116	DK20110792880T	20110526
EP2580135 A1	20130417	EP20110792880	20110526
EP2580135 A4	20140430	EP20110792880	20110526
EP2580135 B1	20160921	EP20110792880	20110526
ES2607602 T3	20170403	ES20110792880T	20110526
JP2013531590 T2	20130808	JP20130514201T	20110526
JP5921532 B2	20160524	JP20130514201T	20110526
MA34367 B1	20130703	MA20130035545	20130107
MX2012014419 A1	20130226	MX20120014419	20110526
SA3933 B1	20150309	SA20110320517	20110608
SG186245 A1	20130130	SG20120090486	20110526
TH127573 A	20130920	TH20121006428	20110526
TR201618414 T4	20170123	TR20160018414T	20110526
US2011303672 AA	20111215	US20100796972	20100609
WO11156140 A1	20111215	WO2011US38050	20110526
ZA201209642 A	20150729	ZA20120009642	20121219

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC ; FIELDS BRIAN ; KEANE BRENDAN ; CROWN CORK AND SEAL TECH CORP

Assignee(s): CROWN CORK AND SEAL TECHNOLOGIES CORP ; DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS

Inventor(s):(std)**:** KEANE BRENDAN ; FIELDS BRIAN

Inventor(s): BRIAN FIELDS ; BRENDAN KEANE

Agent(s): PETER MAXWELL AND ASSOCIATES; FETHERSTONHAUGH AND CO; SMITH DEBRA JANE CLARE; WHITE DUNCAN ROHAN; CARPINTERO MARIO; INO SARI; KURASAWA ICHIRO; MATSUSHITA MITSURU; DESHIMARU TAKESHI; KUMAKURA YOSHIO; TOLGA CAYLAK; FULLMER HAROLD H ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/38 B26D3/08 B65B43/38 B65D17/00 B65D17/28 B65D17/34 (Advanced/Invention); B65D17/34 (Core/Invention); B65D (Subclass/Invention)

CPC: B65D17/165 B65D17/163 B21D51/383 B65D2517/0016 B65D2517/0062 B65D2517/0092 Y10T83/0333

European class: B21D51/38B B65D17/16B1 L65D517/00Y2D L65D517/00Y7A1A L65D517/00Y8A

US class: 220/269 53/492 53/492S 83/879 83/879S

Classification Explorer

Cited documents: WO11026900 A1, USRE30349 E, US4930658 A, US4014455 A, US3977561 A, US3951299 A, US3701330 A, US2008067171 AA, US2004076721 AA, US2004026433 AA, US2003121920 AA, JP61217347 A2, JP61217347, JP59133439 U1, JP59133439 U, JP59133439 U, CN2560573 Y, CN1191513 A,

Forward Citations: WO15183812, WO15070051, WO14158115, WO14055399, USD762114, USD751922, USD750488, USD749415, US9580203, US9550604, US9446879, US9233784, US9033175, US2015166216, US2013118133, EP3009368, CN105873830, CN104837733,

Abstract:
Source: US2011303672A A vent score lacks features to arrest score propagation. Rather encourages fast score propagation upon initial rupture. Venting is achieved through a flap configuration formed by the vent score.

74) Family number: 30351967 (US4105134A) © PatBase

Title: Pressure release closures

Priority:

AU19770041677	19770610	AU19770084877	19770714	AU1977PD00416	19770610
AU19810000416	19810824	AU19810000848	19810922	AU19790001840	19791227
CA19780304008	19780524	AU1977PD00848	19770714	AU1977PD01840	19770928
CA19790339251	19791106	DK19780002255	19780522	NZ19780187328	19780522
EP19810100016D	19780602	EP19780300012P	19780602	US19780889839	19780324
US19770839213	19771004	EP19780300012	19780602	EP19810100016	19780602
FI19780001599	19780519				

Family:

Publication number	Publication date	Application number	Application date
AU197835318 A1	19791115	AU19780035318	19780420
AU518940 B2	19811029	AU19780035318	19780420
BR7803658 A	19790109	BR19780003658	19780607
CA1094472 A1	19810127	CA19780304008	19780524
CA1096790 A1	19810303	CA19790339251	19791106
CA1096790 A2	19810303	CA19790339251	19791106
DE2862312 D1	19831013	DE19782862312	19780602
DE2862374 D1	19840315	DE19782862374	19780602
DK152026 B	19880125	DK19780002255	19780522
DK152026 C	19880718	DK19780002255	19780522
DK156045 B	19890619	DK19810004486	19811009
DK156045 C	19891120	DK19810004486	19811009
DK225578 A	19781211	DK19780002255	19780522
DK448681 A	19811009	DK19810004486	19811009
EP0000091 A1	19781220	EP19780300012	19780602
EP0000091 B1	19830907	EP19780300012	19780602
EP0032115 A2	19810715	EP19810100016	19780602
EP0032115 A3	19810819	EP19810100016	19780602
EP0032115 B1	19840208	EP19810100016	19780602
ES470541 A1	19791001	ES19780470541	19780606
ES476362 A1	19790801	ES19780476362	19781227
FI68580 B	19850628	FI19780001599	19780519
FI68580 C	19851010	FI19780001599	19780519
FI69283 B	19850930	FI19810002417	19810804
FI69283 C	19860110	FI19810002417	19810804
FI781599 A	19781211	FI19780001599	19780519
FI812417 A	19810804	FI19810002417	19810804
FI812417 L	19810804	FI19810002417	19810804
GR68086 B	19811030	GR19780156308	19780523
IE48027 B	19840905	IE19780001011	19780519
IE781011 L	19781210	IE19780001011	19780519
IT1156756 A	19870204	IT19780049420	19780517
IT7849420 A0	19780517	IT19780049420	19780517
JP1396118 C3	19870824	JP19780069765	19780609
JP54040783 A2	19790330	JP19780069765	19780609
JP62001899 B4	19870116	JP19780069765	19780609
MX145578 A	19820308	MX19780173756	19780609
NO154225 B	19860505	NO19780001797	19780523

NO154225 C	19860813	NO19780001797	19780523	
NO781797 A	19781212	NO19780001797	19780523	
NZ187328 A	19810424	NZ19780187328	19780522	
NZ192045 A	19810424	NZ19780192045	19780522	
PT68094 A	19780601	PT19780068094	19780529	
US4105134 A	19780808	US19770839213	19771004	
US4155480 A	19790522	US19780889839	19780324	
ZA7802900 A	19790530	ZA19780002900	19780519	

Probable Assignee: BROKEN HILL PTY CO LTD

Assignee(s):(std)**:** BRAKEN HILL PROPRIETARY CO LTD ; BROKEN HILL PROPRIETARY ; BROKEN HILL PROPRIETARY CO LTD SOCIETA DELLO ; BROKEN HILL PTY CO LTD ; THE BROKEN HILL PROPRIETARY CO LTD ; THE BROKEN HILL PTY CO LTD ; THE BROKEN HILL PROPRIETARY COMPANY LIMITED ; BROKEN HILL PROPRIETARY COMPANY LIMITED

Assignee(s): BROKEN HILL PROPRIETARY COMPANY LIMITED THE ; DEBENHAM MICHAEL ; REVILL PETER L ; DALLI ALLAN G ; BROKEN HILL PROPRIETARY CO THE LTD ; BROKEN HILL PROPRIETARY CO LTD

Inventor(s):(std)**:** M DEBENHAM ; MICHAEL DEBENHAM ; P L REVILL ; PETER LEWIS REVILL ; REVILL PETER LEWIS ; REVILL PETER L ; REVILL P L ; REVILL P ; REVELL PETER LOUIS ; PIITAA RUIZU REBIRU ; MAIKURU DEBENHAMU ; DEBENHAM MICHAEL ; DEBENHAM M ; DALLI ALLAN GEORGE ; DALLI ALLAN G ; DALLI A G ; DALLI A ; ARAN JOOJI DARI ; ARAN JIYOOJI DARI ; ALLAN GEORGE DALLI ; DALLI AG

Inventor(s): DEBENHAM M DALLI A G AND REVILL P L ; A G DALLI

Agent(s): SA; KIRBY EADES GALE BAKER

Designated states: BE CH DE FR GB LU NL SE

International class (IPC 8–9): B21D51/38 B21D51/44 B65D17/00 B65D17/28 B65D17/32 B65D3/26 B65D41/32 B65D5/54 B65D75/58 B65D77/30 (Advanced/Invention); B21D51/38 B65D17/28 B65D41/32 (Core/Invention); B65D (Subclass/Invention)

International class (IPC 1–7): B21D/00 B21D51/28 B21D51/38 B21D51/44 B65B39/02 B65D17/06 B65D17/16 B65D17/24 B65D17/28 B65D17/32 B65D41/32 B65D47/08 B65D47/36 B65D51/16 B65D51/18 B67B3/00 B67B5/00 F17C

CPC: B21D51/383 B65D17/161 B65D2205/00

European class: B21D51/38B B65D17/16B L65D205/00

US class: 220/268 220/271

Classification Explorer

Cited documents: US3980200 A, US3972445 A, US3958717 A, US3952912 A, US3912113 A, US3889842 A, US3888199 A, US3760752 A, US3741432 A, US2261117 A, GB2008061 A1, GB1444470 A, FR2318076 A1, DE2421314 A1, DE2347807 A1,

Forward Citations: WO14087418, US9033174, US8215513, US7165696, US6761281, US6405889, US6234336, US6196042, US5769259, US5535911, US5507419, US5305931, US5213238, US5129541, US5011037, US4930658, US4355935, US4319692, US4311249, US4305523, US4278718, US4244489, US4213538, US4205760, US4196823, US2012228296, JP56041157, JP2082499, FR2460852, EP0024190, EP0021843, EP0009987, BE1003066,

Abstract:
Source: US4105134A A push−in pressure releasing resealable closure for an aperture in a sheet metal container member is disclosed, wherein the closure is integral through a connection of metal to the remainder of the container member. The closure is designed so that it is depressible into the container by flexing about the connection when push−in force is applied to the closure, without exceeding the elastic limit of the connection, so that the closure is returned at least substantially to its original position to seal the can contents, upon removal of the push−in force from the closure.

0) US2004040618A – FOOD STORAGE CONTAINERS

75) Family number: 29935126 (US2004040618A) © PatBase

Title: FOOD STORAGE CONTAINERS

Priority:

DE20001060995	20001208	DE20001060996	20001208	DE20001060998	20001208
DE20001060999	20001208	EP20030757710	20031016	DE20015003676	20011114
DE20015009182	20011114	DE20015009185	20011115	US20040882520	20040701
US20030457285	20030609	US20030457319	20030609	DE20021030748	20020709
US20040882551	20040701	WO2003DE03430	20031016	WO2001EP13148	20011114
WO2001EP13233	20011115	WO2002EP14693	20021221	WO2001EP13234	20011115
WO2001EP13147	20011114				

Family:

Publication number	Publication date	Application number	Application date
AT276137 E	20041015	AT20010982485T	20011114
AT319628 E	20060315	AT20010995635T	20011115
AT319631 E	20060315	AT20010990412T	20011114
AT354521 E	20070315	AT20030757710T	20031016
AU200214052 A5	20020618	AU20020014052	20011114
AU2002214052 AA	20020618	AU20020214052	20011114
AU2002214052 BB	20040819	AU20020214052	20011114
AU2002214052 CA	20061207	AU20020214052	20011114
AU2002217034 AA	20020618	AU20020217034	20011115
AU2002226336 AA	20020618	AU20020226336	20011115
AU2002229550 AA	20020618	AU20020229550	20011114
AU2002360076 AA	20040123	AU20020360076	20021221
AU2003273753 AA	20050526	AU20030273753	20031016
BRPI0115272 A	20030812	BR2001PI15272	20011114
BRPI0115272 B1	20090811	BR2001PI15272	20011114
CA2431227 AA	20030606	CA20012431227	20011114
CN100420612 C	20080924	CN20018020153	20011114
CN1224555 C	20051026	CN20018019996	20011115
CN1248639 C	20060405	CN20018019995	20011114
CN1474776 A	20040211	CN20018018946	20011115
CN1478033 A	20040225	CN20018019995	20011114
CN1478041 A	20040225	CN20018019996	20011115
CN1479686 A	20040303	CN20018020153	20011114
DE10060995 A1	20020627	DE20001060995	20001208
DE10060996 C1	20020502	DE20001060996	20001208
DE10060998 C1	20011031	DE20001060998	20001208
DE10060999 C1	20020103	DE20001060999	20001208
DE10230748 C1	20030717	DE20021030748	20020709
DE50103676 D1	20041021	DE20015003676	20011114
DE50109182 D1	20060504	DE20015009182	20011114
DE50109185 D1	20060504	DE20015009185	20011115
DE50306614 D1	20070405	DE20035006614	20031016
DK1339608 T3	20050124	DK20010982485T	20011114
EP1339608 A1	20030903	EP20010982485	20011114
EP1339608 B1	20040915	EP20010982485	20011114
EP1339618 A1	20030903	EP20010995635	20011115
EP1339618 B1	20060308	EP20010995635	20011115
EP1339619 A1	20030903	EP20010990412	20011114

EP1339619 B1	20060308	EP20010990412	20011114	
EP1339620 A1	20030903	EP20010999514	20011115	
EP1673282 A1	20060628	EP20030757710	20031016	
EP1673282 B1	20070221	EP20030757710	20031016	
ES2228960 T3	20050416	ES20010982485T	20011114	
ES2256320 T3	20060716	ES20010990412T	20011114	
ES2256334 T3	20060716	ES20010995635T	20011115	
ES2280788 T3	20070916	ES20030757710T	20031016	
HK1059420 A1	20060804	HK20040100645	20040130	
HK1059420 A3	20040702	HK20040100645	20040130	
HK1059421 A3	20040702	HK20040100646	20040130	
HK1059422 A1	20060804	HK20040100648	20040130	
HK1059422 A3	20040702	HK20040100648	20040130	
HK1060551 A1	20060818	HK20040103540	20040519	
HK1060551 A3	20040813	HK20040103540	20040519	
IN00446MN2003 A	20060113	IN2003MN00446	20030425	
JP2004515679 T2	20040527	JP20020547797T	20011114	
KR100582877 B1	20060524	KR20037005989	20011114	
KR20030051759 A	20030625	KR20037005989	20030430	
MXPA03003096 A1	20040504	MX2003PA03096	20011114	
PL364383 A1	20041213	PL20010364383	20011114	
RU2003114306 A	20041010	RU20030114306	20011114	
RU2283801 C2	20060920	RU20030114306	20011114	
US2004040618 AA	20040304	US20030457319	20030609	
US2004040961 AA	20040304	US20030457285	20030609	
US2005061812 AA	20050324	US20040882520	20040701	
US2005061813 AA	20050324	US20040882551	20040701	
US7096893 BB	20060829	US20030457319	20030609	
US7131550 BB	20061107	US20040882520	20040701	
US7328730 BB	20080212	US20040882551	20040701	
WO0246044 A1	20020613	WO2001EP13147	20011114	
WO0246057 A1	20020613	WO2001EP13234	20011115	
WO0246061 A1	20020613	WO2001EP13148	20011114	
WO0246062 A1	20020613	WO2001EP13233	20011115	
WO04005159 A1	20040115	WO2002EP14693	20021221	
WO05044667 A1	20050519	WO2003DE03430	20031016	

Probable Assignee: BRAUN GMBH

Assignee(s):(std)**:** BRAUN GMBH ; BRAUN GMBKH ; CORONADO JUAN CARLOS ; FRANKE HELMUT ; GILI SERGI ; VILALTA MONTSERRAT ; MILLAN JOSE ; PENARANDA MARIANO ; REBORDOSA ANTONIO ; RAFOLS ROBERT ; VORBECK WOLFGANG ; HERNANDEZ ALEJANDRO

Inventor(s):(std)**:** MILLAN JOSE ; PENARANDA MARIANO ; REBORDOSA ANTONIO ; VILALTA MONTSERRAT ; VORBECK WOLFGANG ; VILALTA M ; SERGI GILI ; RAFOLS ROBERT ; MONTSERRAT VILALTA ; MILLAN KHOSE ; MILLAN J ; MARIANO PENARANDA ; M VILALTA ; KORONADO KHUAN KARLOS ; JUAN CAROLOS CORONADO ; JUAN CARLOS CORONADO ; JOSE MILLAN ; JC CORONADO ; J MILLAN ; HERNANDEZ ALEJANDRO ; GILI SERGI ; FRANKE HELMUT ; CORONADO M VILALTA J MILLAN J ; CORONADO JUAN CAROLOS ; CORONADO JUAN CARLOS ; CORONADO J C ; ANTONIO REBORDOSA ; VIALTA MONTSERRAT

Inventor(s): PEARANDA MARIANO ; ALEJANDRO HERNANDEZ ; J C CORONADO ; CORONADO JUAN ; HELMUT FRANKE ; M VILALTA J MILLAN JC CORONADO ; M VILALTA J MILLAN J C CORONADO ; ROBERT RAFOLS ; WOLFGANG VORBECK

Agent(s):

DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; MACRAE AND CO; FISH AND RICHARDSON PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A23L3/3418 A47J43/00 A47J43/04 B65B1/04 B65B31/04 B65B39/00 B65D1/00 B65D51/16 B65D79/00 B65D79/02 B65D81/20 F04C18/344 F04C23/00 F04C23/02 F04C25/02 F04C29/00 G01L7/08 (Advanced/Invention); B65B31/04 B65D31/04 (Advanced/Non–invention); A23L3/34 A47J43/00 A47J43/04 B65B1/04 B65B31/04 B65D51/16 B65D79/00 B65D81/20 F04C18/34 F04C23/00 F04C25/00 F04C29/00 (Core/Invention)

International class (IPC 1–7): A23L3/3418 A47J A47J43/07 B65B B65B B65B031/04 B65B31/00 B65B31/04 B65D B65D41/56 B65D51/16 B65D51/24 B65D51/26 B65D51/28 B65D51/30 B65D51/32 B65D79/00 B65D79/02 B65D81/20 F04C18/344 F04C23/00 F04C23/02 F04C25/02

CPC: B65D79/02 B65B31/047 F04C18/3442 F04C29/0071 F04C2220/10 B65D51/1683 B65D79/005 B65D81/2015 B65D81/2038 B65D2203/12

European class: B65B31/04E1 B65D51/16E2 B65D79/00B B65D79/02 B65D81/20B1 B65D81/20B3 F04C18/344B2 F04C29/00D2F L65D203/12 R04C220/10

US class: 116/270 141/325 141/326 141/65 141/8 206/524.8 215/230 215/260 215/262 220/203.05 220/203.11 220/203.16 220/203.23 220/212 220/231 220/254.3 220/367.1 99/472

Classification Explorer

Cited documents: WO9717259 A1, WO9607590 A1, WO9108151 A1, WO8800560 A1, WO0246057 A1, US6799506 BB, US6799506 BA, US5974686 A, US5955127 A, US5806703 A, US5803282 A, US5779082 A, US5762282 A, US5762228 A, US5735317 A, US5465857 A, US5279550 A, US5277876 A, US5195427 A, US5137424 A, US4838772 A, US4793717 A, US4778072 A, US4674642 A, US4051971 A, US4016999 A, US3737066 A, US3241514 A, US2655894 A, US2634014 A, US2130180 A, US2004173105 AA, RU2089087 C1, JP7277374 A2, GB2317882 A1, FR2692870 A1, FR2235064 A2, EP0820999 A1, EP0820939 A1, EP0644128 A1, EP0633196 A2, EP0510360 A1, EP0234607 B1, EP0234607 A1, DE8321236 U, DE8321236, DE7409380 U, DE7409380, DE4342394 C1, DE4342394 A1, DE4334250 A1, DE4306171 A1, DE4136150 A1, DE29920316 U1, DE29920316, DE29920316, DE2992031, DE2821852 A1, DE19504638 A1, DE10060999 C1, DE10060998 C1, DE10060996 C1, CH304374 A, CH304374,

Forward Citations: WO15062744, WO15018645, WO11118886, WO10102044, WO10053441, WO09042844, WO08112093, WO07106676, WO06043733, WO05047112, WO05044667, WO04090213, WO04005159, WO03068607, WO03068607, USD772640, USD772002, USD771998, USD771997, USD771432, USD771431, USD675057, USD673808, USD673807, USD615347, USD574485, US9663276, US9624013, US9615689, US9375537, US9359121, US9296467, US9265881, US9242782, US9187223, US9108788, US9085389, US8967413, US8966869, US8833591, US8827556, US8757053, US8733550, US8667768, US8662334, US8430259, US8419279, US8362404, US8348107, US8276776, US8251340, US8240112, US8231273, US8192182, US8176604, US8113246, US8096329, US7967509, US7946766, US7887238, US7886412, US7874731, US7857515, US7857514, US7784160, US7726880, US7621416, US7597479, US7578320, US7389629, US7328730, US7290660, US7131550, US7096893, US6994227, US2016288966, US2015105724, US2015105720, US2015047741, US2013196039, US2013139472, US2012266570, US2012195529, US2012193257, US2012125931, US2012018432, US2011278278, US2011203944, US2010218461, US2010200588, US2010175850, US2010102058, US2010084307, US2010075001, US2009250465, US2009199724, US2009110777, US2009101535, US2008308177, US2008241441, US2008085347, US2008028730, US2007209326, US2007175896, US2006227492, US2006159576, US2004232026, US2004155041, KR100969703, KR100853752, EP2403775, EP1616984, EP1323643, DE202004005887, DE10348119, DE10317310, DE10230748, CN105492847,

Abstract:
Source: US2004040618A A food storage container includes a lid with a vent hole, and a removable cover removably secured to the lid to cover the vent hole. The cover has an evacuation hole. The food storage container further includes a one–way air valve disposed between the vent hole and evacuation hole. With the cover secured to the lid, the one–way air valve inhibits air flow into the container through the vent hole while allowing air flow out of the container via the vent hole and evacuation hole. With the cover removed, the one–way air valve allows bi–directional air flow through the vent hole. An outer surface of the cover defines a smooth sealing area extending about the evacuation hole for sealing against a vacuum pump held against the cover over the evacuation hole to evacuate the container.

0) US2011266281A – BEVERAGE CONTAINER LID WITH MOUTH OPENING AND S...

76) Family number: 49884018 (US2011266281A) © PatBase

Title: BEVERAGE CONTAINER LID WITH MOUTH OPENING AND SEPARATE PUSH IN VENT

Priority: US20100769010 20100428 US20140178356 20140212 WO2011US21620 20110119

Family:

Publication number	Publication date	Application number	Application date
CA2834330 AA	20131025	CA20112834330	20110119
US2011266281 AA	20111103	US20100769010	20100428
US2014158685 AA	20140612	US20140178356	20140212
US8678221 BB	20140325	US20100769010	20100428
US9162795 BB	20151020	US20140178356	20140212
WO11136860 A1	20111103	WO2011US21620	20110119

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** COORS BREWING CO ; CROWN PACKAGING TECHNOLOGY INC ; TOMS RAY ALAN ; THIEMANN DANIEL ALAN

Assignee(s): DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; COORS BREWING COMPANY

Inventor(s):(std)**:** THIEMANN DANIEL ALAN ; TOMS RAY ALAN

Agent(s): GOWLING LAFLEUR HENDERSON LLP; BAKER AND HOSTETLER LLP; JOHNSON BRENT P

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65B43/38 B65D17/00 B65D17/34 B65D51/16 (Advanced/Invention); B65D41/32 (Advanced/Non–invention)

CPC: B65D17/165 B65D41/32 B65D2517/0092

European class: B65D17/16B2 L65D517/00Y8A

US class: 1/1 215/370 215/902 220/231 220/254.2 220/254.3 220/254.4 220/266 220/267 220/267.1 220/268 220/270 220/271 220/906 222/478 53/492 53/492S

Classification Explorer

Cited documents: WO9325445 A1, WO14159208 A1, WO13067398 A2, WO12018549 A1, WO08023983 A1, USD437223 S1, USD422211 S1, USD322222 S1, US8678221 BB, US8196767 BB, US8186532 BB, US8011527 BB, US7975884 BB, US7942285 BB, US7748563 BB, US7513383 BB, US7000797 BB, US6951293 BB, US6763964 BA, US6715629 BB, US6494332 BA, US6354453 BA, US6234338 BA, US6079583 A, US6015060 A, US5860553 A, US5695085 A, US5692636 A, US5555992 A, US5492244 A, US5456378 A, US5397014 A, US5375729 A, US5307947 A, US5285919 A, US5224618 A, US5131555 A, US5011037 A, US4367996 A, US4136797 A, US4134517 A, US4014455 A, US3967754 A, US3964632 A, US3869063 A, US3838788 A, US3795340 A, US3782586 A, US3741432 A, US3441169 A, US3215305 A, US2014054290 AA, US2013270269 AA, US2013118133 AA, US2013075401 AA, US2013037543 AA, US2012202378 AA, US2012199587 AA, US2011266281 AA, US2011108552 AA, US2011056946 AA, US2010294771 AA, US2010219187 AA, US2010018976 AA, US2009206083 AA, US2009200306 AA, US2009090716 AA, US2009065518 AA, US2009039091 AA, US2009039090 AA, US2009001081 AA, US2008011786 AA, US2007215621 AA, US2007051727 AA, US2007045318 AA, US2007029334 AA, US2006016815 AA, US2004211786 AA, US2004159665 AA, US2004144787 AA, US2004140314 AA, US2004056032 AA, US2003111469 AA, US2003075544 AA, US2003038134 AA, JP60150922 A2, JP5504318 T2, JP5310248 A2, JP5178345 A2, JP2007320617 A2, JP2006347580 A2, JP2006160303 A2, JP2005343557 A2, JP2004042982 A2, JP2003285837 A2, JP2001018960 A2, JP2000185757 A2, JP11348979 A2, JP1035662, JP10035662 A2, GB2320008 A1, EP2601109 A1,

EP2113293 A2, CN302188734 A, CA2280461 AA,

Forward Citations: WO15138413, WO14159208, WO13067398, USD762114, USD750488, USD749415, USD731887, USD727725, USD715647, USD715144, USD678784, US9446879, US9403628, US9296529, US9238529, US9233784, US9181007, US9162795, US9102451, US9051081, US8893913, US8567158, US2016023821, US2015053681, US2014069924, US2014054290, CN105473455, CN104364164,

Abstract:
Source: US2011266281A A container lid includes a conventional main or pour opening and a vent opening spaced from the main opening. A vent score defines the shape of the vent opening, and a vent panel covers the vent opening. The vent panel has a raised convex shape. The lower surface of the tab handle includes a protruding portion, seen as a concave shaped element when viewed from above the container lid. The protruding portion of the tab handle can be aligned with the vent panel so application of a downward force on the tab handle transfers force to the vent panel and breaks the vent score. The shapes of the vent panel and concave element of the tab handle can be adjusted for selective and controlled force transfer to create the vent opening.

0) US5813561A – SANITARY BEVERAGE CAN LID

77) Family number: 15194757 (US5813561A) © PatBase

Title: SANITARY BEVERAGE CAN LID

Priority: US19970808108 19970228 US19980009381 19980120 US19990312836 19990517 US19990312837 19990517 US19980185468 19981113 US19980070056 19980430 WO2000US13447 20000516 WO2000US13400 20000516 US20000695450 20001024 WO1998US03779 19980226 WO1999US09125 19990428

Family:

Publication number	Publication date	Application number	Application date
AU199861869 A1	19980918	AU19980061869	19980226
AU199936674 A1	20001110	AU19990036674	19990428
AU199936674 A5	20001110	AU19990036674	19990428
AU200050190 A5	20001205	AU20000050190D	20000516
AU200055876 A5	20001205	AU20000055876D	20000516
CN1113786 C	20030709	CN19988002910	19980226
CN1156387 C	20040707	CN20008007716	20000516
CN1248948 A	20000329	CN19988002910	19980226
CN1351566 A	20020529	CN20008007716	20000516
EP0979197 A1	20000216	EP19980906719	19980226
EP0979197 A4	20010404	EP19980906719	19980226
EP1194337 A1	20020410	EP20000941125	20000516
EP1194337 A4	20041215	EP20000941125	20000516
EP1196328 A1	20020417	EP20000932471	20000516
EP1196328 A4	20050706	EP20000932471	20000516
JP2002514993 T2	20020521	JP19980537854T	19980226
JP2002544080 T2	20021224	JP20000618166T	20000516
MXPA01011661 A1	20050419	MX2001PA11661	20000516
TW356461 B	19990421	TW19980102307	19980219
TW393426 B	20000611	TW19990106990	19990430
US5813561 A	19980929	US19970808108	19970228
US5934497 A	19990810	US19980070056	19980430
US6247608 BA	20010619	US19990312836	19990517
US6450359 BA	20020917	US20000695450	20001024
WO0064761 A1	20001102	WO1999US09125	19990428
WO0069734 A1	20001123	WO2000US13400	20000516
WO0069735 A1	20001123	WO2000US13447	20000516
WO9838100 A1	19980903	WO1998US03779	19980226

Probable Assignee: CHANG CHARLESUS

Assignee(s):(std)**:** CHANG LUCY ; CHANG LUCY H ; CHANG TA PENG CHARLES ; CHARLES CHANG ; LUCY CHANG ; CHANG CHARLES

Assignee(s): CHANG CHARLESUS

Inventor(s):(std)**:** C CHANG ; CHANG C ; CHANG CHARLES ; CHANG L ; CHANG LUCY ; CHANG LUCY H ; CHANG TA PENG CHARLES ; CHARLES CHANG ; L CHANG ; LUCY CHANG

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

International class (IPC 8–9): B65D17/32 B65D17/34 B65D17/347 B65D17/353 B65D8/04 B65D85/72 (Advanced/Invention); B65D17/28 (Core/Invention);

	B65D17/34 B65D41/32 (Core/Non−invention)
International class (IPC 1−7):	B65D17/32 B65D17/34 B65D17/347 B65D17/353 B65D8/04 B65D85/72
CPC:	Y10S220/906 B65D17/165 B65D2517/0014 B65D2517/0049 B65D2517/0076
European class:	B65D17/16B2 L65D517/00Y2C L65D517/00Y6A L65D517/00Y7C1
US class:	206/508 206/509 220/268 220/269 220/270 220/608 220/609 220/906
Classification Explorer	
Cited documents:	WO9838100 A1, WO9708066 A2, US5934497 A, US5813561 A, US5749488 A, US5743445 A, US5415313 A, US5119955 A, US5108003 A, US4998641 A, US4895270 A, US4784283 A, US4480763 A, US4407425 A, US4394927 A, US4333582 A, US4318493 A, US4266688 A, US4262815 A, US4247014 A, US4114778 A, US4084721 A, US4078695 A, US4051976 A, US4047634 A, US3977561 A, US3967752 A, US3952912 A, US3946895 A, US3858754 A, US3618815 A, US3554400 A, US3315837 A, US3300081 A, US2547059 A, US2426550 A, US2124823 A, JP2058550 A2,
Forward Citations:	WO14152235, WO12109260, WO09005050, WO0069734, USD747649, USD747199, USD696593, USD672235, USD658980, USD640141, USD638704, USD637489, USD478062, USD432015, US9457930, US9321563, US9199763, US9033174, US9016034, US8998015, US8931656, US8857644, US8833585, US8733576, US8708188, US8627978, US8534490, US8454292, US8371467, US8336726, US8336725, US8240498, US8167162, US8113375, US8109406, US7918359, US7757887, US7380685, US7314148, US7168586, US7165696, US6889861, US6729495, US6443323, US6425493, US6405889, US6338418, US6247608, US6234336, US6138856, US6102242, US5947317, US2012043325, US2011233227, US2011186575, US2011100854, US2010326281, US2010294768, US2010287886, US2010276423, US2010126992, US2010116374, US2010012657, US2009223981, US2009179033, US2009173737, US2008302756, US2008110888, US2008099480, US2007262079, US2007108209, US2007068943, US2006043091, US2005224497, US2005218013, US2005184074, US2004206764, US2004195240, US2004040963, JP2009012823, EP1353852, EP1196328, CN105873829, CN104837733,

Abstract:
Source: US5813561A This invention comprises a sanitary beverage can lid wherein the center platform of the lid including the pull tab is raised from below the rim of the can as in conventional cans to a position close to or slightly above the rim of the can. The center platform diameter is reduced in diameter to provide additional space from the exterior of the can body to the edge of the platform. The pull tab is positioned in the middle of the center platform so that the end of the pull tab is at the edge of the center platform to facilitate opening of the can. The raised center platform and the lid design prevent an individual's lip from coming in contact with the groove along the edge of the lid where dirt may accumulate. Another feature is the provision of a raised rim on the platform with an interior drain−back slope so that any excess beverage flows back into the can.

0) GB2103174A – EASY OPEN CAN END

78) Family number: 8934805 (GB2103174A) © PatBase

Title: Easy open can end

Priority: GB19810023861 19810804

Family:

Publication number	Publication date	Application number	Application date
GB2103174 A1	19830216	GB19810023861	19810804

Probable Assignee: CVACHO DANIEL STEVE

Assignee(s):(std)**:** CVACHO DANIEL STEVE

Assignee(s): DANIEL STEVE CVACHO

Inventor(s):(std)**:** CVACHO DANIEL STEVE

Inventor(s): DANIEL STEVE CVACHO

International class (IPC 8–9): B21D51/38 B65D17/32 (Advanced/Invention); B21D51/38 B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/32 B65D41/32

CPC: B21D51/383 B65D17/165 B65D2517/0098

European class: B21D51/38B B65D17/16B2 L65D517/00Y9

Classification Explorer

Forward Citations: GB2156772,

Abstract:
Source: GB2103174A A tab 42 is rivetted at 26 to a tear strip and is twisted over and over to wrap the tear strip around the tab, which is finally located in a recess 44 in the can end. Ribs 34, 36a and 36b define the movement of the tab and protect the users lips from sharp edges when drinking. Similarly a depression 38 in the tear strip forms a raised pad to protect the nose and upper lip of the user. In one construction, there is a layer of sealant between the tab and strip where they are rivetted together. A sanitary cover may overlie the tear strip and part of the can rim and is rolled up with the strip when the can is opened.

0) US3339789A – SCORED METAL CAN

79) Family number: 30018490 (US3339789A) © PatBase

Title: SCORED METAL CAN

Priority: US19650463499 19650614

Family:

Publication number	Publication date	Application number	Application date
BE682492 A	19661114		19660614
CH461410 A	19680831	CH19660008539	19660614
DE1552095 A1	19700409	DE19661552095	19660611
GB1136006 A	19681211	GB19660026405	19660614
NL6608205 A	19661215	NL19660008205	19660614
SE310348 B	19690428	SE19660007584	19660602
US3339789 A	19670905	US19650463499	19650614

Probable Assignee: STOLLE CORP

Assignee(s):(std)**:** STOLLE CORP

Inventor(s):(std)**:** CLOSE F ; KAMINSKI E ; STOLLE R ; STOLLE RALPH J ; RALPH J STOLLE ; KAMINSKI ELTON G ; J STOLLE RALPH ; J CLOSE FREDERICK ; G KAMINSKI ELTON ; FREDERICK J CLOSE ; ELTON G KAMINSKI ; CLOSE FREDERICK J

International class (IPC 8–9): B21D51/38 B21D51/44 B65D17/34 (Advanced/Invention); B21D51/38 B65D17/28 (Core/Invention)

International class (IPC 1–7): B21D51/42 B65D

CPC: B21D51/383 B65D17/165

European class: B21D51/38B B65D17/16B2

US class: 220/270

Classification Explorer

Cited documents: US3250426 A,

Forward Citations: US4157693, US3870001, US3815534, US3416700, US3394837, US2014323641, US2010227191, JP50028072, FR2704833, DE2406306,

Abstract:
Source: GB1136006A 1,136,006. Opening containers. STOLLE CORP. 14 June, 1966 [14 June, 1965], No. 26405/66. Heading B8D. [Also in Division B3] A metal can end has a groove 15 which defines an area to be torn–out by a pull tab secured to the can end by a rivet. The thickness of the can end under the groove 15 is uniform and a score line 14 is provided in the groove. The can end may be formed separate from or integral with the walls of the can. The score line 14 is preferably medially positioned in the groove 15 and the can is lacquered after the grooving and scoring operations.

0) US2004099664A – MODIFIED SCORE FOR SMOOTH OPENABILITY

80) Family number: 30587869 (US2004099664A) © PatBase

Title: MODIFIED SCORE FOR SMOOTH OPENABILITY

Priority: US20020304243 20021126 WO2003US37290 20031120

Family:

Publication number	Publication date	Application number	Application date
AT471881 E	20100715	AT20030786976T	20031120
AU2003295772 AA	20040618	AU20030295772	20031120
BRPI0316736 A	20051018	BR2003PI16736	20031120
BRPI0316736 B1	20150512	BR2003PI16736	20031120
DE60333127 D1	20100805	DE20036033127	20031120
EP1601580 A1	20051207	EP20030786976	20031120
EP1601580 B1	20100623	EP20030786976	20031120
MXPA05005368 A1	20051005	MX2005PA05368	20031120
RU2005116223 A	20060210	RU20050116223	20031120
RU2335441 C2	20081010	RU20050116223	20031120
US2004099664 AA	20040527	US20020304243	20021126
US6761281 BB	20040713	US20020304243	20021126
WO04048215 A1	20040610	WO2003US37290	20031120

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** HARTMAN WILLIAM H ; REKSAM BEVERIDZH KEHN KOMPANI ; REXAM BEVERAGE CAN CO

Assignee(s): REXAM BEVERAGE CAN COMPANY

Inventor(s):(std)**:** HARTMAN WILLIAM ; HARTMAN WILLIAM H ; KHARTMAN UIL JAM KH ; WILLIAM H HARTMAN

Inventor(s): KHARTMAN UIL'JAM KH.

Agent(s): CAWLEY AIMEE ELIZABETH

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B65D17/32 B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/32 B65D17/34

CPC: Y10S220/906 B65D17/165 B65D2517/0014

European class: B65D17/16B2 L65D517/00Y2C

US class: 220/269 220/906

Classification Explorer

Cited documents: USRE31702 E, USD424438, USD402555 S1, USD397296 S1, USD385192 S1, USD382481 S1, US6354453 BA, US6330954 BA, US6260728 BA, US6164480 A, US6161717 A, US6129230 A, US6024239 A, US5934498 A, US5875911 A, US5860553 A, US5738237 A, US5715964 A, US5711448 A, US5692636 A, US5653355 A, US5555992 A, US5456378 A, US5405039 A, US5375729 A, US5373721 A, US5307947 A, US5219257 A, US5129541 A, US5064087 A, US5011037 A, US5007554 A, US4994009 A, US4930658 A, US4901880 A, US4804104 A, US4801038 A, US4796772 A, US4733793 A, US4576305 A, US4504181 A, US4402421 A, US4363419 A, US4320850 A, US4305523 A, US4257529 A, US4254890 A, US4205760 A, US4184607 A, US4122791 A, US4105134 A, US4084721 A, US4061243 A, US4030631 A, US4027612 A, US4024981 A, US4023703 A, US4018178 A, US4015744 A, US4006700

A, US3982657 A, US3967752 A, US3954075 A, US3952912 A, US3949692 A, US3946683 A, US3938455 A, US3912114 A, US3870001 A, US3836038 A, US3757989 A, US3688718 A, US3687099 A, US3650006 A, US3563199 A, US3424337 A, US3411470 A, US3291336 A, US2003042258 AA, US2003034346 AA, US2002113069 AA, JPS62199237, JPS57199535, JP8244769 A2, JP62199237 A2, JP6024443 A2, JP57199535 A2, JP2003137284, JP1308744 A2, GB563812 A, EP0704382 A2, EP0564725 A1,

Forward Citations: WO14152235, WO09095672, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD691039, US9650449, US9580203, US9561888, US9446879, US9254945, US9233784, US9187581, US9181007, US9033175, US8969484, US8937134, US8895672, US8783495, US8627979, US8592527, US8567158, US8507641, US8492491, US8394897, US8383760, US8344073, US8133954, US8063154, US8013073, US7975884, US7816459, US7709580, US2016023801, US2014054332, US2013126529, US2013118133, US2011089134, US2008011786, US2007284374, RU2575062, EP2085319,

Abstract:
Source: US2004099664A An ecology end member for a beverage container has a central panel wall with a product side, a public side, and an outer peripheral edge. A non−detachable tab is secured to the public side of the central panel wall by a rivet. A displaceable tear panel is located in the central panel wall adjacent the rivet. The tear panel is defined by a frangible score and a non−frangible hinge segment. The frangible score has a tear panel geometry with an outer periphery defined by a curvilinear score length. The tear panel geometry is asymmetrically skewed having a large radius of score curvature in a first outer quadrant of the tear panel to provide low resistance to opening the tear panel at the large radius. The tear panel has a radially outermost segment of the score located in a different quadrant of the tear panel.

0) US5931331A – EASY–OPEN MECHANISM FOR CAN END

81) Family number: 11656289 (US5931331A) © PatBase

Title: EASY–OPEN MECHANISM FOR CAN END

Priority: US19970805204 19970227

Family:

Publication number	Publication date	Application number	Application date
US5931331 A	19990803	US19970805204	19970227

Probable Assignee: CROWN CORK AND SEAL TECHNOLOGIES

Assignee(s):(std)**:** CROWN CORK AND SEAL TECH CORP

Assignee(s): CROWN CORK AND SEAL TECHNOLOGIES ; CROWN CORK AND SEAL TECHNOLOGIES CORP ; DEUTSCHE BANK AG ; DEUTSCHE BANK NEW YORK BRANCH AGENT AG AS ; CROWN PACKAGING TECHNOLOGY INC ; CHASE MANHATTAN BANK AS COLLATERAL AGENT ; CHASE MANHATTAN BANK COLLATERAL AGENT AS ; CITICORP NORTH AMERICA INC ; CITICORP NORTH AMERICA INC COLLATERAL AGENT AS

Inventor(s):(std)**:** CALHOUN MICHAEL C ; HOFFMAN DAVID M ; KIRK WILLIAM A ; MCFARLAND JEFFREY

International class (IPC 8–9)**:** B65D41/32 (Advanced/Invention); B65D41/32 (Core/Invention)

International class (IPC 1–7)**:** B65D41/32

CPC: Y10S220/906 B65D17/165 B65D2517/0014 B65D2517/0089

European class: B65D17/16B2 L65D517/00Y2C L65D517/00Y7Z

US class: 220/269 220/906

Classification Explorer

Cited documents: US5692636 A, US5375729 A, US5129541 A, US5064087 A, US4930658 A, US4901880 A, US4733793 A, US4605141 A, US4465204 A, US4402421 A, US4387827 A, US4320850 A, US4084721 A, US4062471 A, US4051976 A, US3967752 A, US3843011 A, DE2553835 A1,

Forward Citations: WO02070165, WO02066178, US6575684, US6164480,

Abstract:
Source: US5931331A A can end having an improved pour–type ecology opening mechanism includes a conventional can end wall that contains a score line that defines a displaceable panel. The score line includes an initial design rupture point, a radiused portion having a first tangent point and a second tangent point, and a main portion that terminates at a final transition point. The can end further includes a tab having a liftable heel portion and a tab nose portion, with the tab nose portion being positioned to apply downward pressure to the panel at a pressure point on the displaceable panel when the heel portion is lifted. The tab has a center line that is coincident with a radius of said can end wall. Advantageously, the pressure point is positioned a distance, taken in the direction of the center line, from the second tangent point of the radiused portion that is selected to prevent a buildup of force that would otherwise hasten propagation of separation along the main portion of the score. This prevents splashing of the beverage during opening of the can by the consumer.

0) US3554400A – NONFLIPPING BEER CAN END

82) Family number: 25111658 (US3554400A) © PatBase

Title: NONFLIPPING BEER CAN END

Priority: US19640345615 19640218

Family:

Publication number	Publication date	Application number	Application date
AT258190 B	19671110	AT19640011075	19641230
AU5511665 A1	19660818	AU19650055116	19650215
BE659915 A	19650818		19650218
DE1938022 U	19660505	DE1964C012009U	19640710
GB1038130 A	19660803	GB19640032324	19640807
US3554400 A	19710112	US19640345615	19640218

Probable Assignee: CONTINENTAL CAN CO

Assignee(s):(std)**:** CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC

Inventor(s):(std)**:** BOZEK JOHN S

Inventor(s): JOHNS BOZEK ; JOHN S BOZEK

International class (IPC 8–9)**:** B21D51/38 B65D17/34 B65D17/40 (Advanced/Invention); B65D17/28 (Core/Invention); B65D (Subclass/Invention)

International class (IPC 1–7)**:** B65D17/20 B65D17/24 B65D17/34

CPC: B65D17/16 B65D17/165

European class: B65D17/16 B65D17/16B2

US class: 220/273 220/54 D9/438

Classification Explorer

Cited documents: US484099 A, US2305528 A, US2112231 A, US2029329 A, US195604 A, US1022050 A,

Forward Citations: US9637179, US9296432, US9033174, US5248053, US5149238, US4333582, US3774801, US3688718, US2016152282, US2008000905, US2002088804, FR2467788, EP1196328, DE102004047062,

Abstract:
Source: GB1038130A 1,038,130. Opening containers. CONTINENTAL CAN CO. Inc. Aug. 7, 1964 [Feb. 18, 1964], No. 32324/64. Heading B8D. The end wall of a can which may be opened by means of a tear tab 20 riveted to a removable portion 17, is formed with an inward rib 21, which acts to absorb the excess metal produced on scoring a line 18, surrounding the portion 17, whereby the rib prevents the can end from bulging. In a modification the rib 21 has two upright walls, Fig. 5 (not shown); and it may project outwards from the surface of the can end, Fig. 6 (not shown). The rib may be divided into short portions on circumferentially opposite sides of the portion 17. There may be two concentric reinforcing ribs projecting either outwards, Figs. 7–8 (not shown), or inwards, Fig. 9 (not shown), of the can. Instead of being of C–shape in plan view, the rib may be fully circular, Figs. 10–15 (not shown), either single or double.

0) US2004099665A – EASY–OPENING CAN END AND A CONVERSION PRESS AND...

83) Family number: 30587870 (US2004099665A) © PatBase

Title: EASY–OPENING CAN END AND A CONVERSION PRESS AND TOOLS FOR PRODUCING THE SAME

Priority: US20020305455 20021127

Family:

Publication number	Publication date	Application number	Application date
US2004099665 AA	20040527	US20020305455	20021127

Probable Assignee: STOLLE MACHINERY CO LLC

Assignee(s):(std)**:** MCELDOWNEY CARL F ; MITCHELL MARK R

Assignee(s): STOLLE MACHINERY CO ; STOLLE MACHINERY CO LLC ; STOLLE MACHINERY INC ; GMAC COMMERCIAL FINANCE LLC

Inventor(s):(std)**:** MCELDOWNEY CARL F ; MITCHELL MARK R

International class (IPC 8–9): B65D17/40 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/40

CPC: B65D17/163 B65D2517/0016 B65D2517/007 B65D2517/0079

European class: B65D17/16B1 L65D517/00Y2D L65D517/00Y7B1 L65D517/00Y7C3

US class: 220/270 220/276 413/14 413/25 413/66

Classification Explorer

Cited documents: USD421907, USD411107 S1, US6401956 BA, US6332552 BA, US6026971 A, US5934498 A, US5671860 A, US5647497 A, US5405039 A, US5064087 A, US5052573 A, US5042681 A, US5038856 A, US4848623 A, US4784284 A, US4610156 A, US4406378 A, US4002262 A, US3941277 A, US3900128 A, US3843012 A, US3838788 A, US3785522 A, US3752353 A, US3662916 A, US3544025 A, US3404801 A,

Forward Citations: WO13188556, WO10133809, US9550604, US9376233, US8978915, US8904843, US8646643, US8109405, US7677404, US7270246, US2015144633, US2012263835, US2012199586, US2012118891, US2008314906, US2008078764, US2006039780, JP6126213, JP2015518802, FR2945794, EP3009368,

Abstract:
Source: US2004099665A An easy–opening can end and tools for making the same in which the can end is intended for cans of food products or other non–pourable products in which the can end has an improved pull tab attached to a relatively large removable panel portion and in which the tab has a bending fulcrum behind the rivet to facilitate severance of the score around the removable panel. The tab has a C–shaped slot in it around the side of the rivet toward the center of the can end to permit limited bending of the tab along the fulcrum line.

0) US2010025402A – PUSHDOWN OPENINGS WITH PURCHASE, LEVERAGE AND G...

84) Family number: 44322974 (US2010025402A) © PatBase

Title: PUSHDOWN OPENINGS WITH PURCHASE, LEVERAGE AND GAS–TIGHT RESEALABILITY FOR CAN ENDS

Priority: US20080067806P 20080303 US20080188494P 20080811 WO2009US01503 20090304 US20090583008 20090811

Family:

Publication number	Publication date	Application number	Application date
US2010025402 AA	20100204	US20090583008	20090811

Probable Assignee: HOFFMAN JONATHAN H

Assignee(s):(std)**:** HOFFMAN JONATHAN H ; LAZICH MATTHEW

Inventor(s):(std)**:** HOFFMAN JONATHAN H ; LAZICH MATTHEW

Agent(s): GEORGE PHILIP WHITE,PATENT AGENT; GEORGE PHILIP WHITE PATENT AGENT

International class (IPC 8–9)**:** B65B43/38 B65D17/34 (Advanced/Invention); B65B43/38 B65D17/28 (Core/Invention)

CPC: B65D17/166 B65D2517/002 B65D2517/0032

European class: B65D17/16B2B L65D517/00Y2Z L65D517/00Y5A

US class: 220/270 53/492

Classification Explorer

Forward Citations: WO15099636, WO14135619, US9457930, US9254945, US2014054332, US2012199586, JP2012184027, CN102874457, CN102795384, CN102795384,

Abstract:
Source: US2010025402A An easy–to–open and optionally resealable beverage can end provides opening by pressing downward. An actuator lies flat initially to conform to stackability requirements, but is readily repositionable to a ready–to–open state. In the ready–to–open state a planer surface of the actuator or tab is at a substantial angle to the can's top. A rigid body is interposed between it and the can's tear panel. The actuator is secured to the can top. Downward force ruptures the tear panel, opening the can. Using a wide actuator, a shallow protrusion on the actuator enables gas–tight resealability of a can opening. The shallow protrusion has an interrupted helix and fits into the can opening. Providing tab attachment via a radiused slot allows the small degree of rotational movement needed for the helix to be turned and pull the actuator bottom sealingly abutted proximate to the perimeter of the opened area.

0) US4301940A – EASY OPEN CAN END CONSTRUCTION

85) Family number: 8426720 (US4301940A) © PatBase

Title:	Easy open can end construction
Priority:	US19800172177 19800725

Family:

Publication number	Publication date	Application number	Application date
US4301940 A	19811124	US19800172177	19800725

Probable Assignee:	CVACHO DANIEL S
Assignee(s):(std)**:**	CVACHO DANIEL S
Inventor(s):(std)**:**	CVACHO DANIEL S
International class (IPC 8–9)**:**	B65D17/32 B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)
International class (IPC 1–7)**:**	B65D17/32 B65D17/34
CPC:	B65D17/165 B65D2517/0098
European class:	B65D17/16B2 L65D517/00Y9
US class:	220/269 220/274
Classification Explorer	
Cited documents:	US3970212 A, US3204805 A,
Forward Citations:	WO9207766, US9573724, US5531340, US5292022, US5190149, US5114068, US2011147382, GB2291030,

Abstract:
Source: US4301940A An easy open can end construction and method of making it. The pull tab and tear strip remain fully locked onto the can end, and the opening strip does not dip into the beverage. Bead members positioned externally of the tear strip not only preserve a desired orientation of the pull tab with respect to the tear strip but also serve as a guard against the user's face or tongue contacting the raw edge left after lifting the tear strip. The tear strip itself is provided with one or more protective pads to protect the user's face. A sanitary cover member overlies the tear strip and is rolled up with the pull tab and tear strip becoming interlocked therewith. A method of making the score line pattern is included so that tearing occurs along a single side of the bottom of the score line pattern to avoid a zigzag tear pattern which is dangerous to the user's tongue or lips. Finally, a method of making a rivet is included in which two metal thicknesses are joined together to avoid a leaking problem encountered in single metal thickness rivets.

0) US2003178397A – LASER ENGRAVED OPENING TAB

86) Family number: 14813649 (US2003178397A) © PatBase

Title: LASER ENGRAVED OPENING TAB

Priority: SE19980001489 19980428 US19990412362 19991005 US20000482620 20000114 US20000482616 20000114 US20030395102 20030325 WO1999SE00692 19990428

Family:

Publication number	Publication date	Application number	Application date
SE9801489 A0	19980428	SE19980001489	19980428
US2003178397 AA	20030925	US20030395102	20030325
US6476349 BA	20021105	US20000482620	20000114
US6479787 BA	20021112	US20000482616	20000114
US6926487 BA	20050809	US19990412362	19991005

Probable Assignee: REXAM AB

Assignee(s):(std)**:** PLM AB ; REXAM AB

Assignee(s): REXAM BOX AB ; PLM DJAKNEGATAN AB

Inventor(s):(std)**:** JENDICK MANFRED

Inventor(s): MANFRED JENDICK

Agent(s): NIXON AND VANDERHYE PC

International class (IPC 8–9)**:** B21C47/34 B21C51/00 B23K26/08 (Advanced/Invention); B21C47/34 B21C51/00 B23K26/08 (Core/Invention); B65D (Subclass/Invention)

International class (IPC 1–7)**:** B21D51/44 B23K26/00 B23K9/12 B65H23/16

CPC: B21C47/34 B21C51/005 B23K26/0846 B23K2201/007

European class: B21C47/34 B21C51/00B B23K26/08E2B L23K201/00R

US class: 219/121.68 219/121.680S 219/121.69 219/121.690P 219/121.75 219/121.82 219/79 242/615.1 413/25 413/8

Classification Explorer

Cited documents: WO9909853 A2, WO9853949 A1, WO9747397, WO9711288 A1, WO9504342 A2, WO9308541, WO9304943 A1, WO0168460 A2, WO0003832 A1, USRE35446 E, USD289017 S1, USD268250 S1, USD261364 S1, USD210870 S1, US6872913 BA, US6501046 BA, US6498318 BA, US6489985 BA, US6479787 BA, US6476349 BA, US6433302 BA, US6373876 BA, US6326586 BA, US6202880 BA, US6163010 A, US6160835 A, US6140606 A, US6111907 A, US6105806 A, US6080958 A, US6053349 A, US6002098 A, US5967726 A, US5906760 A, US5863017 A, US5855969 A, US5854805 A, US5837962 A, US5817243 A, US5813782 A, US5799815 A, US5782024 A, US5751436 A, US5719372 A, US5718457 A, US5698119 A, US5660747 A, US5660516 A, US5653900 A, US5649363 A, US5635900 A, US5612525 A, US5609778 A, US5609043 A, US5593606 A, US5578120 A, US5570384 A, US5552574 A, US5523125 A, US5511920 A, US5492077 A, US5465780 A, US5416951 A, US5401979 A, US5359766 A, US5359176 A, US5331443 A, US5329090 A, US5315108 A, US5262613 A, US5248878 A, US5235454 A, US5215864 A, US5206496 A, US5202199 A, US5191695 A, US5170279 A, US5125780 A, US5112695 A, US4998641 A, US4970600 A, US4965829 A, US4940880 A, US4922077 A, US4910739 A, US4880137 A, US4765532 A, US4675500 A, US4635545 A, US4578329 A, US4564739 A, US4530631 A, US4517638 A, US4517436 A, US4485935 A, US4476781 A, US4465204 A, US4459910 A, US4431124 A, US4405852 A, US4393411 A, US4380129 A, US4375025 A, US4363179 A, US4331256 A, US4323755 A, US4323317 A, US4322016 A, US4304981 A, US4219127 A, US4203240 A, US4184607 A, US4024545 A, US3958354 A, US3898417 A, US3866398 A, US3863823 A, US3858122 A, US3854647 A, US3825151 A, US3822496 A, US3796344 A, US3704614 A, US3701880 A, US3692223 A, US3627858 A, US3626141 A, US3549733 A, US3471641 A, US3281024 A, US3182994 A, US3087665 A, US3001787 A, US2648278 A, US2641998 A, US2003015507 AA, JP9208095, JP9192870, JP8175006, JP8053121 A2, JP77053099, JP7053099 A2, JP63252746, JP63020591, JP61086305 A2, JP58187091 A2, JP5178346, JP2020684, JP11216589, JP11058050, JP11006086, JP10113786, GB2320008 A1,

GB2185613 A1, GB1124958, FR2750396, FR2649628, EP0618037 A1, EP0564639 A1, EP0482776 A1, EP0377915 A2, EP0289022 A2, EP0208175 A2, EP0085484 A1, EP0040929 A1, EP0040922 A1, DE8900453 U, DE8900453 A1, DE4435531 A1, DE4405203 A1, DE4339321 A1, DE4338774 A1, DE4322252 A1, DE4143339 A1, DE4106151 A1, DE4103746, DE3822097 A1, DE29816109 U1, DE29816109, DE2981610, DE2052512 A1, DE19840934 A1, DE19701547, DE19639619 A1, DE19607621 A1, CA2232871 AA, CA2168435 AA, AU8179494 A1,

Forward Citations: WO16146875, WO15199046, WO14028360, WO14028360, WO13158771, WO08070979, WO07044798, USD625184, US9637267, US9592569, US9278776, US9187221, US9186924, US9007413, US8844747, US8146768, US8008598, US7903336, US6926487, US6926456, US6872913, US6808351, US6686694, US2013319066, US2011226636, US2011084051, US2010193519, US2010119784, US2010084382, US2007240325, US2007056932, US2006140746, US2006012821, US2005045637, US2004058238, GB2444018, GB2444018, DE112006002720, CN104703746,

Abstract:
Source: US2003178397A In a method of manufacturing articles to be included in cans, a metal strip (1) is fed to an article forming unit (11), in which it is punched and stamped to form the articles. Before the article forming operations, the strip (1) is provided with laser engravings on one of its upper and lower surfaces, or on both these surfaces. The laser engravings form indicative marks on the articles. In addition to the article forming unit (11), an apparatus for manufacturing such articles has a metal strip supply (8), means (13) for feeding the strip (1) and a laser unit (9) for providing the indicative laser engraved marks on the articles.

87) Family number: 31450352 (US2007177962A) © PatBase

Title: METHOD AND DEVICE FOR THE PRODUCTION OF A CAN BODY, AND CAN BODY

Priority: CH20030001140 20030627 CH20040000054 20040115 CH20050000016 20050114 WO2005CH00341 20050617 US20050629472 20050617 EP20040736969 20040617 WO2005CH00016 20050114 WO2004CH00368 20040617 EP20050700311 20050114 WO2006CH00031 20060114

Family:

Publication number	Publication date	Application number	Application date
AT474689 E	20100815	AT20050750490T	20050617
AT487551 E	20101115	AT20040736969T	20040617
AT504369 E	20110415	AT20060700203T	20060114
BRPI0506878 A	20070612	BR2005PI06878	20050114
BRPI0512117 A	20080206	BR2005PI12117	20050617
BRPI0606325 A2	20090616	BR2006PI06325	20060114
DE502004011875 D1	20101223	DE200450011875T	20040617
DE502005009965 D1	20100902	DE200550009965T	20050617
DE502006009246 D1	20110519	DE200650009246T	20060114
EA008857 B1	20070831	EA20060001323	20050114
EA009223 B1	20071228	EA20070000053	20050617
EA010537 B1	20081030	EA20070001509	20060114
EA200601323 A1	20070227	EA20060001323	20050114
EA200700053 A1	20070427	EA20070000053	20050617
EA200701509 A1	20071228	EA20070001509	20060114
EP1644145 A1	20060412	EP20040736969	20040617
EP1644145 B1	20101110	EP20040736969	20040617
EP1713612 A2	20061025	EP20050700311	20050114
EP1713612 B1	20130320	EP20050700311	20050114
EP1755818 A1	20070228	EP20050750490	20050617
EP1755818 B1	20100721	EP20050750490	20050617
EP1838473 A1	20071003	EP20060700203	20060114
EP1838473 B1	20110406	EP20060700203	20060114
ES2349299 T3	20101229	ES20050750490T	20050617
ES2356328 T3	20110407	ES20040736969T	20040617
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ES2415108 T3	20130724	ES20050700311T	20050114
JP2007521963 T2	20070809	JP20060548065T	20050114
JP2008502541 T2	20080131	JP20070515761T	20050617
JP2008526519 T2	20080724	JP20070550653T	20060114
JP5150252 B2	20130220	JP20070515761T	20050617
JP5295569 B2	20130918	JP20070550653T	20060114
JP5313451 B2	20131009	JP20060548065T	20050114
PT1644145 T	20110204	PT20040736969T	20040617
PT1713612 T	20130531	PT20050700311T	20050114
PT1755818 T	20101021	PT20050750490T	20050617
SI1644145 T1	20110331	SI20040031590T	20040617
SI1713612 T1	20130830	SI20050031736T	20050114
US2007177962 AA	20070802	US20040562035	20040617
US2008050205 AA	20080228	US20050585996	20050114

US2008164241 AA	20080710	US20050629472	20050617	
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US2009008429 AA	20090108	US20060795260	20060114	
US7584639 BB	20090908	US20040562035	20040617	
US7670094 BB	20100302	US20050585996	20050114	
US7971771 BB	20110705	US20060795260	20060114	
US9365344 BB	20160614	US20050629472	20050617	
WO05000498 A1	20050106	WO2004CH00368	20040617	
WO05068127 A2	20050728	WO2005CH00016	20050114	
WO05068127 A3	20051215	WO2005CH00016	20050114	
WO05123323 A1	20051229	WO2005CH00341	20050617	
WO06074570 A1	20060720	WO2006CH00031	20060114	

Probable Assignee: CREBOCAN AG

Assignee(s):(std)**:** BOLTSHAUSER WERNER ; CAPROSOL AG ; CREBOCAN AG

Inventor(s):(std)**:** BOLTHAUSER WERNER ; BOLTSHAUER WERNER ; BOLTSHAUSER WERNER

Inventor(s): WERNER BOLTSHAUER ; WERNER BOLTSHAUSER

Agent(s): BUECHEL VON REVY AND PARTNER; ROEB MARIA; HARNESS DICKEY AND PIERCE PLC; HARNESS DICKEY AND PIERCE

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B21C37/08 B21C37/09 B21D39/03 B21D51/26 B21D51/30 B21D51/46 B23D21/04 B23K1/20 B23K26/00 B23K26/20 B23K26/28 B23K31/02 B23K33/00 B26D3/16 B65B7/28 B65D8/04 B65D8/16 B65D8/18 B65D8/22 B65D83/14 B65D83/38 (Advanced/Invention); B23K101/12 B65D83/42 (Advanced/Non–invention);
B21C37/08 B21D39/03 B21D51/00 B21D51/26 B21D51/30 B21D51/38 B23D21/00 B23K1/20 B23K26/00 B23K31/02 B23K33/00 B26D3/16 B65D8/04 B65D83/14 (Core/Invention)

International class (IPC 1–7): B21C37/08 B21D51/26 B23K26/28 B23K33/00 B65D83/14

CPC: B23K26/206 B65D7/04 B65D7/38 B65D7/46 Y10T29/49828 Y10T29/49904 Y10T29/49986 Y10T29/53322 B21C37/09 B21D51/2646 B21D51/2669 B23K26/32 B23K2203/50 B23K33/006 B21D51/2676 B23K26/28 B23K2201/12 B21D51/2653 B65B7/28 B23D21/04 B65D83/38 B21D51/26 B23K26/282 B23K2201/125 B23K2203/04 B23K2203/10 B65D83/42 Y10T428/12493 B23K2201/34 B23K2203/08

European class: B21C37/09 B21D51/26 B21D51/26C B21D51/26E B21D51/26L B23D21/04 B23K26/20D B23K26/28 B23K26/28B B23K26/32D B23K26/32L2 B23K33/00B2 B65D7/04 B65D7/38 B65D7/46 B65D83/38 L23K201/12 L23K201/12B L23K201/34 L23K203/04 L23K203/10 L65D83/42

US class: 1/1 219/121.64 219/121.640P 220/23.91 220/23.910S 220/612 220/669 220/669S 220/678 228/13 228/13S 228/160 228/160P 29/429 29/429S 29/469 29/469S 29/527.4 29/527.400S 29/773 413/1 413/12 413/12S 413/19 413/19S 413/1P 413/2 413/26 413/2P 413/2S 413/3 413/4 413/69 413/69S 413/74 413/8 413/8P 428/615 428/615S 72/379.4 72/58

Classification Explorer

Cited documents: WO9534474 A1, WO05068127 A2, WO05000498 A1, WO0242196 A2, WO02092466 A1, WO0202257 A1, WO0035772 A1, US7670094 BB, US7584639 BB, US7584639 B1, US6581401 BA, US6389866 BA, US5997232 A, US5511826 A, US5313862 A, US5186592 A, US5170684 A, US5111721 A, US5086677 A, US5060367 A, US4905858 A, US4889023 A, US4694137 A, US4615470 A, US4591405 A, US4467171 A, US4341943 A, US4315132 A, US4199851 A, US4095544 A, US3548564 A, US3526186 A, US3337944 A, US244465 A, US2444465 A, US2008164241 AA, US2007177962 AA, US2005167091 AA, US2005166979 AA, US2004188394 AA, JP9290318 A2, JP9253763 A2, JP9133293 A2, JP9011329 A2, JP7223111 A2, JP7032176 A2, JP63032129 U1, JP63032129 U, JP62171424 U1, JP62171424 U, JP60165282 A2, JP47036529 Y1, JP42000443 B4, JP42000443 B1, JP38015843 B1, JP3022557 U1, JP2004345694 A2,

JP2004195483 A2, JP2003293105 A2, JP2003214539 A2, JP2003146333 A2, JP2003081265 A2, JP2002532347 T2, JP2001354295 A2, JP1100614 U1, JP10305338 A2, JP10129660 A2, JP10113716 A2, JP10094848 A2, JP10082500 A2, GB878713 A, FR2543923 A1, FR1599934 A, EP1153837 A1, EP0853515 B1, EP0853515 A1, EP0853514 B1, EP0853514 A1, EP0853513 B1, EP0853513 A1, EP0666124 B1, EP0666124 A1, EP0547754 A2, EP0525729 A1, EP0397558 A1, EP0208564 A1, EP0200098 A2, DE2456097 A1, DE19834400 C1, DE19716079 A1, DE1452556 A1,

Forward Citations: WO14074895, WO12135968, WO12019313, WO11116485, WO11116485, WO11094879, WO10063132, WO09155721, WO09015498, WO08002741, WO06074570, WO05123323, WO05068127, USD787952, USD698668, US9382034, US9365344, US9327338, US9227480, US9126257, US9038864, US8978922, US8764070, US8555692, US8322183, US8257577, US8240185, US7971771, US7954354, US7934410, US7726165, US7670094, US7584639, US2016354831, US2013306659, US2013251551, US2013219720, US2013216298, US2012247166, US2012024911, US2011203677, US2011167889, US2011114650, US2010263431, US2010206891, US2010199741, US2009008429, US2008277282, US2008164241, US2008022746, US2007295051, KR101301488, JP2011525458, GC3212, EP2366472, EP2359954, EA9223, EA8857, EA10537, EA019326, EA018405, EA010537, EA009223, EA008857, DE102010038151, DE102008003211, DE102008003211, CN105478524, CN104271958, CN103691832,

Abstract:
Source: US2007177962A A can body with a jacket−like closed wall and a base constructed on one end of the can wall includes an external base covering in the form of a sheet material. The base covering is fixed into position on an annular connection region of the can body. The base covering can form a basically flat imprintable region in a main region that is surrounded by the connection region. If a bar code can be applied in this imprintable region, then a restriction of the configuration possibility of the can wall disappears. The base covering can form a stand region whereby a standing can body is only in contact with the support surface if necessary via the base covering, and consequently the occurrence of corrosion problems is prevented. A retaining device that leaves the base of a held can body free and a position fixing apparatus are used for fixing the base covering into position. A decorative foil on the exterior of the can wall can be overlapped by the base covering, which serves to prevent a detachment of the decorative foil on the base.

0) US2009212004A – VACUUM CONTAINER WITH PROTECTIVE FEATURES

88) Family number: 42996065 (US2009212004A) © PatBase

Title: VACUUM CONTAINER WITH PROTECTIVE FEATURES

Priority: US20080040609 20080229 US20080098300 20080404 US20080304271F 20080227 US20090332323F 20090212 US20090344035F 20090922 US20090335885F 20090423 US20120398644 20120216 US20110385514F 20110215

Family:

Publication number	Publication date	Application number	Application date
US2009212004 AA	20090827	US20080098300	20080404
US2009218349 AA	20090903	US20080040609	20080229
US2012145584 AA	20120614	US20120398644	20120216
US8141741 BB	20120327	US20080098300	20080404
US9216840 BB	20151222	US20120398644	20120216
USD588018 S1	20090310	US20080304271F	20080227
USD611838 S1	20100316	US20090344035F	20090922
USD652740 S1	20120124	US20090335885F	20090423
USD672663 S1	20121218	US20110385514F	20110215

Probable Assignee: SILGAN CONTAINERS LLC

Assignee(s):(std)**:** DISS THOMAS S ; HOLSTINE ROWDY ; HU JIANWEN ; SILGAN CONTAINERS CORP ; SILGAN CONTAINERS LLC ; SOISUVARN KAMCHAT ; METZGER ELIZABETH A ; METZGER ELIZABETH ; BAKER GERALD ; CLYDE THOMAS J

Assignee(s): CORPORATE CREATIVE INC

Inventor(s):(std)**:** BAKER GERALD ; CLYDE THOMAS J ; DISS THOMAS S ; HOLSTINE ROWDY ; HU JIANWEN ; METZGER ELIZABETH ; METZGER ELIZABETH A ; SOISUVARN KAMCHAT

Agent(s): FOLEY AND LARDNER LLP; REINHART BOERNER VAN DEUREN SC

International class (IPC 8–9): B65D17/00 B65D25/00 B65D43/02 B65D45/00 B65D53/00 B65D6/38 B65D69/00 B65D8/00 B65D8/04 B65D8/12 B65D8/18 B65D81/20 (Advanced/Invention); B65D8/08 (Advanced/Non–invention); B65D25/00 B65D45/00 B65D53/00 B65D69/00 B65D8/04 (Core/Invention)

CPC: B65D7/04 B65D7/46 B65D17/08 B65D17/163 B65D43/0212 B65D81/2015 Y10S220/906

European class: B65D17/08 B65D17/16B1 B65D43/02S3E B65D7/04 B65D7/46 B65D81/20B1

US class: 1/1 206/223 206/524.8 206/524.800P 215/382 220/316 220/378 220/610 220/610S 220/669 220/672 220/906 D9/774 D9/776 D9/777

Locarno class: 09/02 09/01

Classification Explorer

Cited documents: WO5001799, WO4006294, WO05001799, WO04006294, USD98420 S1, USD88258 S1, USD73511 S1, USD67869 S1, USD663622 S1, USD661204 S1, USD661203 S1, USD653124 S1, USD652740 S1, USD649887 S1, USD638311 S1, USD632190 S1, USD632189 S1, USD632187 S1, USD631759 S1, USD626015 S1, USD620377 S1, USD619022 S1, USD615877 S1, USD614971 S1, USD614508 S1, USD614049 S1, USD613617 S1, USD612732 S1, USD611838 S1, USD607727 S1, USD607329 S1, USD606406 S1, USD606405 S1, USD606404 S1, USD606403 S1, USD606402 S1, USD596958 S1, USD596957 S1, USD596956 S1, USD596955 S1, USD596881 S1, USD596879 S1, USD596505 S1, USD596504 S1, USD596503 S1, USD596502 S1, USD596501 S1, USD596500 S1, USD588936 S1, USD588021 S1, USD588020 S1, USD588019 S1, USD588018 S1, USD588017 S1, USD588016 S1, USD562685 S1, USD56181 S1, USD559121 S1, USD559120 S1, USD549596 S1, USD548111 S1, USD546183 S1, USD543845 S1, USD542650 S1, USD542130 S1, USD538660 S1, USD538646 S1, USD538645 S1, USD536264 S1, USD536263 S1, USD536262 S1, USD535197 S1, USD534428 S1, USD534079 S1, USD533783 S1, USD532306 S1, USD530614 S1, USD525530 S1, USD525139 S1, USD525129 S1, USD524160 S1, USD523347 S1, USD523341 S1, USD522371 S1, USD517417 S1, USD514937 S1, USD512917 S1, USD511458 S1, USD510024 S1, USD507485 S1, USD498143 S1, USD494475 S1, USD493370 S1, USD491288 S1, USD489984 S1, USD489983 S1,

USD485182 S1, USD484808 S1, USD481317 S1, USD480957 S1, USD480956 S1, USD480650 S1, USD479999 S1, USD478287 S1, USD478286 S1, USD476896 S1, USD476889 S1, USD469360 S1, USD466817 S1, USD466813 S1, USD466024 S1, USD466021 S1, USD466019 S1, USD465418 S1, USD465158 S1, USD464569 S1, USD457435 S1, USD456712 S1, USD455656 S1, USD454073 S1, USD453003 S1, USD450244 S1, USD449993 S1, USD449539 S1, USD448677 S1, USD448675 S1, USD448672 S1, USD448671 S1, USD448666 S1, USD448304 S1, USD448303 S1, USD448302 S1, USD447693 S1, USD447422 S1, USD447061 S1, USD446458 S1, USD446455 S1, USD445694 S1, USD445693 S1, USD445339 S1, USD445337 S1, USD441295 S1, USD440498 S1, USD437430 S1, USD437230 S1, USD437229 S1, USD435455 S1, USD432424 S1, USD432423 S1, USD431470 S1, USD431465 S1, USD429164 S1, USD429151 S1, USD427905 S1, USD427515 S1, USD427514 S1, USD427057 S1, USD426164 S1, USD425424 S1, USD423365 S1, USD423336 S1, USD421907 S1, USD421720 S1, USD421393 S1, USD420587 S1, USD419886 S1, USD419444 S1, USD419058 S1, USD417392 S1, USD416200 S1, USD414693 S1, USD413519 S1, USD412441 S1, USD412118 S1, USD411106 S1, USD409496 S1, USD408221 S1, USD406236 S1, USD406065 S1, USD404970 S1, USD404254 S1, USD403963 S1, USD403962 S1, USD401152 S1, USD399753 S1, USD399430 S1, USD399429 S1, USD399428 S1, USD399425 S1, USD399129 S1, USD398531 S1, USD392566 S1, USD383037 S1, USD38167 S1, USD381259 S1, USD379589 S1, USD378572 S1, USD373084 S1, USD367426 S1, USD366428 S1, USD365021 S1, USD357414 S1, USD357413 S1, USD355368 S1, USD355129 S1, USD352898 S1, USD345105 S1, USD329597 S1, USD323290 S1, USD320153 S1, USD319580 S1, USD317405 S1, USD307238 S1, USD299426 S1, USD288527 S1, USD28842 S1, USD28732 S1, USD286000 S1, USD2820 S1, USD25941 S1, USD252798 S1, USD24991 S1, USD249111 S1, USD237853 S1, USD235184 S1, USD234251 S1, USD231773 S1, USD231087 S1, USD228229 S1, USD227868 S1, USD227863 S1, USD22751 S1, USD226176 S1, USD226175 S1, USD224642 S1, USD224516 S1, USD212525 S1, USD207133 S1, USD201400 S1, USD185649 S1, USD129604 S1, USD124880 S1, USD124645 S1, USD120587 S1, USD120226 S1, USD101728 S1, US829477 A, US7812292 BB, US7748551 BB, US7344041 BB, US7243808 BB, US7198168 BB, US7134565 BA, US7112771 BB, US7108469 BB, US6889862 BB, US6877607 BB, US6769561 BB, US6685417 BB, US6585125 BA, US6575684 BB, US6419874 BB, US6398052 BA, US6374657 BA, US6354458 BA, US6347717 BA, US6341709 BA, US6321927 BB, US6294131 BA, US6280679 BA, US6230912 BA, US6220475 BA, US6213325 BA, US6206222 BA, US6206220 BA, US6164480 A, US6164474 A, US6161713 A, US6131761 A, US6123211 A, US6095360 A, US6092688 A, US6062409 A, US6012601 A, US5988417 A, US5988416 A, US5957647 A, US5749488 A, US5722561 A, US5720412 A, US5711448 A, US566067 A, US5316169 A, US5279841 A, US5240138 A, US5206222 A, US5152417 A, US5103995 A, US5065888 A, US5052573 A, US5040698 A, US4938051 A, US4936482 A, US4880131 A, US4846366 A, US4804105 A, US4512490 A, US4010860 A, US3949877 A, US3648884 A, US3448891 A, US3349987 A, US3317110 A, US3297194 A, US3170590 A, US2868410 A, US2252915 A, US2142743 A, US2063013 A, US2009218349 AA, US2009212004 AA, US2007138181 AA, US2007108916 AA, US2007108198 AA, US2007108197 AA, US2007108196 AA, US2007102425 AA, US2007090120 AA, US2007068943 AA, US2007045218 AA, US2007012648 AA, US2006186082 AA, US2006131257 AA, US2006108318 AA, US2005082299 AA, US2002172578 AA, US2001009244 AA, US2001009107 AA, US2001002671 AA, US1832806 A, US1773278 A, US1706638 A, US1013775 A, FR2584680, FR/051799, BE/046294,

Forward Citations: WO13173014, USD781100, USD781099, USD766112, USD766077, USD760601, USD754485, USD754484, USD739266, USD734155, USD730111, USD721588, USD720231, USD720230, USD708953, USD703057, USD696594, USD686918, USD684268, USD683247, USD680424, USD677585, USD677584, USD677564, USD674279, USD672663, USD667306, USD663622, USD663210, USD661204, USD661203, USD658078, USD656042, USD653951, USD653563, USD653562, USD653126, USD653125, USD653124, USD653123, USD652742, USD652741, USD652740, USD651526, USD645351, USD631759, USD615877, USD614049, US9550604, US9382034, US9360233, US9216840, US8978922, US8863947, US8485378, US2015166216, US2014367418, US2014263286, US2012061263, US2010260901, US2009218349, US2009212004, US2008302799,

Abstract:
Source: US2009212004A A container including a metal sidewall is provided. The metal sidewall includes a first end; a second end; a center portion having a principal width; a first feature positioned between the center portion and the first end, the first feature extending from the sidewall such that the maximum width of the sidewall at the first feature is greater than the principal width; and a second feature positioned between the center portion and the second end, the second feature extending from the sidewall such that the maximum width of the sidewall at the second feature is greater than the principal width. The container further includes a first bead located in the center portion of the sidewall; and a second bead located in the center portion of the sidewall.

0) US2012312815A – CAN END WITH FILM INSERT

89) Family number: 44429102 (US2012312815A) © PatBase

Title: CAN END WITH FILM INSERT

Priority: EP20100787143 20101209 GB20090021551 20091209 WO2010EP69267 20101209

Family:

Publication number	Publication date	Application number	Application date
DE602010027925 D1	20151112	DE201060027925T	20101209
EP2509878 A1	20121017	EP20100787143	20101209
EP2509878 B1	20150930	EP20100787143	20101209
ES2554654 T3	20151222	ES20100787143T	20101209
GB200921551 A0	20100127	GB20090021551	20091209
US2012312815 AA	20121213	US20100514462	20101209
US8998028 BB	20150407	US20100514462	20101209
WO11070107 A1	20110616	WO2010EP69267	20101209

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC ; FARROW SYLVIA MARIA ; RAMSEY CHRISTOPHER PAUL ; HYDE ELEANOR RACHEL ANN

Assignee(s): CROWN PACKAGING TECHNOLOGY INC ALSIP ; DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS

Inventor(s):(std)**:** FARROW SYLVIA ; FARROW SYLVIA MARIA ; HYDE ELEANOR ; HYDE ELEANOR RACHEL ANN ; RAMSEY CHRISTOPHER ; RAMSEY CHRISTOPHER PAUL

Agent(s): MARKS AND CLERK LUXEMBOURG LLP; SMITH DEBRA JANE CLARE; LIND ROBERT; CARPINTERO MARIO; BAKER AND HOSTETLER LLP; SMITH DEBRA

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/28 B65D17/34 B65D51/00 B65D51/24 (Advanced/Invention)

CPC: Y10S220/906 B65D17/165 B65D2517/0014 B65D2517/0052 B65D2517/0062

European class: B65D17/16B2 L65D517/00Y2C L65D517/00Y6B L65D517/00Y7A1A

US class: 206/459.1 220/212 220/694 220/703 220/906 40/307

Classification Explorer

Cited documents: WO0168460 A2, US7198168 BB, US6386814 BB, US5845801 A, US5775534 A, US5316166 A, US5096082 A, US4559729 A, US4363179 A, US2009057314 AA, US2008272120 AA, US2008197618 AA, US2007145055 AA, EP1967456 A1, EP1218248 B1, EP1218248 A2, EP0482776 A1,

Forward Citations: USD762114, USD750488, USD749415, US9446879, US9254945, US9233784, US2014054332, US2013118133,

Abstract:
Source: US2012312815A A container end (20) having a dispensing aperture (50) with a closed position, in which the dispensing aperture is sealed, and an open position, in which product may be dispensed through the aperture (50). The end (20) includes a flexible film (70), which has at least one tongue (75) anchored to the end (20) outside the periphery of the aperture (50) and having a free end, which is visible in the dispensing aperture once the aperture is opened. The free end of the tongue (75) is concealed when the aperture (50) is closed, but becomes visible to a user once the aperture (50) is opened. Thus the film tongue (75) provides opportunities for promotional activities e.g. Prize award.

0) US4524646A – TAB CAN OPENING TOOL

90) Family number: 4789672 (US4524646A) © PatBase

Title: TAB CAN OPENING TOOL

Priority: US19830463598 19830602

Family:

Publication number	Publication date	Application number	Application date
US4524646 A	19850625	US19830463598	19830602

Probable Assignee: KIMBERLIN JR FRED

Assignee(s):(std)**:** KIMBERLIN JR FRED

Inventor(s):(std)**:** KIMBERLIN JR FRED

International class (IPC 8–9): B67B7/40 (Advanced/Invention); B67B7/00 (Core/Invention)

International class (IPC 1–7): B67B7/40

CPC: Y10S7/901 B67B7/403

European class: B67B7/40B

US class: 7/901 81/3.55 81/355

Classification Explorer

Cited documents: US4373246 A, US4371021 A, US4309921 A, US4257287 A, US4253352 A,

Forward Citations: WO04065282, WO04002873, US8870012, US8695457, US8496069, US8434563, US8156626, US6219869, US5947317, US5771759, US5555778, US5509380, US5337632, US5267945, US5107728, US5079791, US4899050, US4873896, US4864898, US4712454, US4663994, US4617842, US2011314968, US2011209886, US2009090716, GB2288161,

Abstract:
Source: US4524646A A hand–held tool for opening tab open cans. The tool includes an elongated body having an opening with converging surfaces which can be slipped over the tab. A narrow edge at the lower margin of the opening assists initially in lifting the tab away from the can end. As the tool is pivoted upwardly, a chisel–shaped nose portion on the front end of the tool assists in pressing the weakened portion of the can end inwardly. The relationship between the tool nose portion and the thin edge prevents interference between the nose portion and the can end when the tool is initially slipped onto the tab.

0) US4576305A – SHEET METAL WALL PANEL AND INTEGRAL OPENER STRU...

91) Family number: 2225446 (US4576305A) © PatBase

Title: Sheet metal wall panel and integral opener structure

Priority: CA19860502669 19860225 US19850736080 19850520 WO1986US00325 19860218

Family:

Publication number	Publication date	Application number	Application date
AU198654565 A1	19861224	AU19860054565	19860218
AU574311 B2	19880630	AU19860054565	19860218
CA1249780 A1	19890207	CA19860502669	19860225
DE3672762 D1	19900823	DE19863672762	19860218
EP0223776 A1	19870603	EP19860901638	19860218
EP0223776 A4	19880829	EP19860901638	19860218
EP0223776 B1	19900718	EP19860901638	19860218
JP62502885 T2	19871119	JP19860501369	19860218
US4576305 A	19860318	US19850736080	19850520
WO8607033 A1	19861204	WO1986US00325	19860218

Probable Assignee: WEIRTON STEEL CORP

Assignee(s):(std)**:** WEIRTON STEEL CORP

Assignee(s): WEIRTON STEEL CORP WEIRTON W VA US ; ISG TECHNOLOGIES INC ; SAUNDERS WILLIAM T

Inventor(s):(std)**:** SAUNDERS T ; SAUNDERS WILLIAM T

Inventor(s): SAUNDERS T WILLIAM WEIRTON WV 26062 US ; WILLIAM T SAUNDERS

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; MACRAE AND CO

Designated states: AU DE FR GB IT JP

International class(IPC 8–9)**:** B65D17/32 B65D17/34 B65D17/347 B65D17/35 B65D17/353 (Advanced/Invention); B65D17/28 (Core/Invention)

International class(IPC 1–7)**:** B65D17/32 B65D17/34

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/269

Classification Explorer

Cited documents: US4491236 A, US4417668 A, US4416389 A, US4399925 A, US4386713 A, US3795341 A, DE1809984 A1,

Forward Citations: WO9204262, WO16102151, US7677404, US6761281, US6675487, US5813811, US5711447, US5590993, US5411159, US5145086, US5133473, US4913294, US4801038, US2014263334, US2013284742, US2008078764, ES2137842, EP0460200, EP0362458,

Abstract:
Source: US4576305A Convenience feature wall panel (36) and integral opener (52) structure providing Class 1 and Class 2 lever action severance of scored sheet metal. In a beverage can embodiment, a U–shaped tab (40) positioned on the can end wall with its closed end contiguous to peripheral chime seam metal (32) is moved from the original contour of the wall panel to provide a pour opening (94). The movable tab, along with the integrally attached opener, is retained by sheet metal at the open end (46) of the U–shaped movable tab which is unitary with the remainder of the wall panel. Profiling formed in the movable tab sheet metal presents longitudinally–extending reinforcing rib means (53, 54, 55, 56) with a transverse portion (58) of the movable tab which is free of longitudinally–extending rib means providing for folding of longitudinal sections (90, 92) of the movable tab in overlaying relationship to each other and a portion of such remainder of the wall panel as the movable tab and integral opener are stored externally of the can out of the way of the pour opening.

0) US2016023802A – BEVERAGE CAN CLOSING MEMBER

92) Family number: 51692974 (US2016023802A) © PatBase

Title: BEVERAGE CAN CLOSING MEMBER

Priority: DE201110010602 20110208 WO2012EP52149 20120208

Family:

Publication number	Publication date	Application number	Application date
CA2864174 AA	20140808	CA20122864174	20120208
DE102011010602 A1	20120809	DE201110010602	20110208
EP2697126 A1	20140219	EP20120707712	20120208
US2016023802 AA	20160128	US20120766941	20120208
WO12107502 A1	20120816	WO2012EP52149	20120208

Probable Assignee: WB INNOVATIONS LTD

Assignee(s):(std): BRANDTNER WLADIMIR ; WB INNOVATIONS LTD

Assignee(s): WB INNOVATIONS LTDLUTZSTR. 783355GRABENSTATTDE ; WB INNOVATIONS LIMITED

Inventor(s):(std): BRANDTNER WLADIMIR

Inventor(s): BRANDTNER WLADIMIRDE

Agent(s): FETHERSTONHAUGH AND CO; FRIESE MARTIN; FRIESE MARTIN ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/38 B65D17/00 B65D17/32 B65D17/34 (Advanced/Invention)

CPC: B65D17/166 B21D51/383 B65D2231/022 B65D2517/0014 B65D2517/0034 B65D2517/005 B65D2517/0062

European class: B21D51/38B B65D17/16B2B L65D231/02A L65D517/00Y2C L65D517/00Y5A1 L65D517/00Y6A1 L65D517/00Y7A1A

US class: 220/258.5

Classification Explorer

Cited documents: WO9736795 A1, WO9727117 A1, WO9220584 A1, WO10022951 A1, US6098830 A, US5497896 A, US4880137 A, US4673099 A, US2007051725 AA, US2005236411 AA, GB2426970 A1, GB2246342 A1, DE9417720 U, DE29804273 U1, DE19930786 A1, DE19750783 A1,

DE102008044981 A1

Forward Citations: WO15188974,

Abstract:
Source: US2016023802A The invention relates to a beverage can closing member (99) comprising a frame part (10) that has a frame (11) and is used to open a beverage can by pressing in a lid of the beverage can at a predetermined breaking line, further comprising a covering member (42) to be arranged in an opening of a beverage can, and a locking device (46) which is designed and/or arranged on the covering member (42) and is designed and/or arranged in such a way that the covering member (42) arranged in an opening of a beverage can can be locked in an opening of a beverage can, the covering member (42) being designed in a closure part (40) and/or insertion part which is accommodated in the frame (11) of the frame part (10).

0) US4723391A – CONTAINERS

93) Family number: 28672883 (US4723391A) © PatBase

Title: Containers

Priority: CA19850497462 19851212 CA19850594394 19851212 CA19890594394 19890321 US19860908708 19860929 GB19840031447 19841213 WO1985GB00569 19851211 EP19860900193 19851211

Family:

Publication number	Publication date	Application number	Application date
AT40970 E	19890315	AT19850900193T	19851211
AU198652354 A1	19860701	AU19860052354	19851211
AU589392 B2	19891012	AU19860052354	19851211
BRPI8507117 A	19870331	BR1985PI07117	19851211
CA1258644 A1	19890822	CA19850497462	19851212
CA1262101 A1	19891003	CA19850594394	19851212
CA1262101 A2	19891003	CA19890594394	19890321
CA1262101 C	19891003	CA19890594394	19890321
DE3568411 D1	19890406	DE19853568411	19851211
DK155988 B	19890612	DK19860003848	19860812
DK155988 C	19891120	DK19860003848	19860812
DK384886 A	19860812	DK19860003848	19860812
DK384886 A0	19860812	DK19860003848	19860812
EP0204799 A1	19861217	EP19860900193	19851211
EP0204799 B1	19890301	EP19860900193	19851211
ES296108 U	19880201	ES19870296108U	19870115
ES296108 Y	19880916	ES19870296108U	19870115
ES296108 Y1	19881017	ES19870296108U	19870115
ES549928 A1	19870416	ES19850549928	19851213
ES8704831 A1	19870701	ES19850549928	19851213
FI79501 B	19890929	FI19860003220	19860806
FI79501 C	19900110	FI19860003220	19860806
FI863220 A	19860806	FI19860003220	19860806
FI863220 A0	19860806	FI19860003220	19860806
GB2168312 A1	19860618	GB19840031447	19841213
GB2168312 B2	19890517	GB19840031447	19841213
GB8431447 A0	19850123	GB19840031447	19841213
GR853005 B	19860415	GR19850103005	19851212
HK7890 A	19900209	HK19900000078	19900201
IE57256 B	19920617	IE19850003141	19851212
IE853141 L	19860613	IE19850003141	19851212
IN166498 A	19900519	IN1985MA00994	19851210
JP62500995 T2	19870423	JP19860500044T	19851211
KR920002809 B1	19920404	KR19860070565	19860813
MX162461 A	19910513	MX19850000915	19851213
NO167081 B	19910624	NO19860003241	19860812
NO167081 C	19911002	NO19860003241	19860812
NO863241 A	19861013	NO19860003241	19860812
NO863241 A0	19860812	NO19860003241	19860812
NZ214508 A	19890329	NZ19850214508	19851210
PT81663 A	19860102	PT19850081663	19851212

PT81663 B	19920731	PT19850081663	19851212	
SG8990406 A	19900706	SG19890090406	19890706	
TR24091 A	19910313	TR19850050028	19851213	
US4723391 A	19880209	US19860908708	19860929	
US4762246 A	19880809	US19870087676	19870820	
WO8603474 A1	19860619	WO1985GB00569	19851211	
ZA8509402 A	19861126	ZA19850009402	19851209	
ZM9685 A	19860327	ZM19850000096	19851213	
ZW22285 A	19860723	ZW19850000222	19851210	

Probable Assignee: METAL BOX PLC

Assignee(s):(std)**:** CMB FOODCAN PLC ; CMB PACKAGING UK LTD ; METAL BOX PUBLIC LMT COM ; METAL BOX PLC

Assignee(s): METAL BOX PUBLIC CO A CORP OF LTD ; METAL BOX PUBLIC CO LTD ; ASHLEY ROBERT J ; METAL BOX PUBLIC LIMITED CO ; METAL BOX PUBLIC LIMITED COMPANY ; MILLER JOHN D ; RING MAURICE F ; METAL BOX P L C ; CMB PACKAGING UK LIMITED

Inventor(s):(std)**:** ASHLEY GB ROBERT JON ; ASHLEY R J ; ASHLEY ROBERT ; ASHLEY ROBERT J ; ASHLEY ROBERT JOH ; ASHLEY ROBERT JON ; DEREK MILLER JOHN ; FRANK RING MAURICE ; JOHN DEREK MILLER ; JON ASHLEY ROBERT ; MAURICE FRANK RING ; MILLER GB JOHN DEREK ; MILLER J D ; MILLER JOHN ; MILLER JOHN D ; MILLER JOHN DEREK ; RING GB MAURICE FRANK ; RING M F ; RING MAURICE ; RING MAURICE F ; RING MAURICE FRANK ; ROBERT JOH ASHLEY ; ROBERT JON ASHLEY

Agent(s): CULLENS PATENT AND TRADE MARK ATTORNEYS; CULLENS PTY LTD; GOWLING LAFLEUR HENDERSON LLP

Designated states: AT AU BB BE BR CH DE DK FI FR GB IT JP KR LI LU NL NO SE US

International class (IPC 8–9): B65B61/18 B65B7/01 B65B7/16 B65B7/28 B65D17/34 B65D53/08 B65D75/64 B65D77/00 B65D77/20 B65D77/30 B65D85/00 (Advanced/Invention); B65B7/28 (Advanced/Non–invention)

International class (IPC 1–7): B65B31/00 B65B55/02 B65B61/18 B65B7/16 B65B7/28 B65D1/00 B65D17/34 B65D17/50 B65D41/32 B65D47/36 B65D53/08 B65D77/00 B65D77/20 B65D77/30 B65D85/00 B65D85/72 B67B

CPC: B65D77/206 B65B7/01

European class: B65B7/01 B65D77/20E1B3B2A

US class: 220/257 220/270 220/271 53/133 53/133.1 53/412

Classification Explorer

Cited documents: US4544080 A, US4440310 A, US4405056 A, US4289250 A, US4215791 A, US4208852 A, US4191195 A, US4189060 A, US4029033 A, US3908857 A, US3790424 A, US3381884 A, US3318495 A, US3287878 A, US3166234 A, US2870935 A, US2719647 A, US2034007 A, GB915596 A, GB418268 A, GB2069872 A1, GB1341587 A, GB1262461 A, GB1175582 A, FR1320350 A, FR1274143 A, EP0088725 A2, EP0030649 A2, AU5793980 A1, AU562111 B2, AU491323,

Forward Citations: WO9961340, WO9423677, WO9414677, WO8903350, WO12015079, US9469456, US9457940, US9181007, US8844597, US7658295, US6988642, US6775959, US6648163, US6578726, US5992674, US5857582, US5514442, US5433992, US5261990, US5226281, US5217790, US5209366, US5143240, US5118377, US5027968, US5009364, US4971218, US4969309, US4961986, US4946063, US4934544, US4836380, US2016046422, US2010059473, US2005150891, US2004079765, KR101071127, GB2353986, EP0680890, EP0377747, EP0312311, DE9316645, DE9305280, DE19612633, DE10034298, AU680861,

Abstract:
Source: US4723391A PCT No. PCT/GB85/00569 Sec. 371 Date Sep. 29, 1986 Sec. 102(e) Date Sep. 29, 1986 PCT Filed Dec. 11, 1985 PCT Pub. No. WO86/03474 PCT Pub. Date Jun. 19, 1986.A method of making a succession of food or beverage containers each comprising a vessel having a mouth surrounded by a rim presenting an upper surface of plastics material. The method comprises filling each vessel in turn and feeding over the vessel a continuous composite web of lidding material produced by forming spaced apart perforations, each comprising at least one through hole, in a continuous first web of diaphragm material having a plastics

surface weldable to the vessel rim. The method also comprises forming spaced apart pull tabs in a continuous second web of peel strip material by folding each of a succession of portions of the second web against itself to form each pull tab and subsequently applying and peelably securing the second web which is narrower than the first web to the first web so as to obturate the perforations such that one pull tab is situated adjacent each perforation and remains secured to the second web only at a junction on its one end. Moreover, the method comprises cutting a lid from the web and securing the lid by an endless peripheral weld to the upper surface of the rim thereby closing the vessel.

0) US2013146592A – SUPPLEMENTAL LIQUID STORAGE DEVICE ATTACHABLE T...

94) Family number: 48019860 (US2013146592A) © PatBase

Title: SUPPLEMENTAL LIQUID STORAGE DEVICE ATTACHABLE TO A PRIMARY BEVERAGE CONTAINER

Priority: US20090211139P 20090326 US20090496502 20090701 US20120684568 20121125 US20130758980 20130204

Family:

Publication number	Publication date	Application number	Application date
BR102012031177 A2	20130924	BR20121031177	20121207
US2013146592 AA	20130613	US20130758980	20130204
US8365960 BA	20130205	US20090496502	20090701
US8662351 BB	20140304	US20130758980	20130204
WO11003048 A1	20110106	WO2010US40852	20100701

Probable Assignee: KALAOUZE FADI

Assignee(s):(std)**:** KALAOUZE FADI

Assignee(s): FADI KALAOUZE

Inventor(s):(std)**:** KALAOUZE FADI ; MCCLUNG DAVID

Inventor(s): FADI KALAOUZE

Agent(s): MARK; MARK YOUNG PA; YOUNG MARK

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D81/32 B67D7/74 B67D7/78 (Advanced/Invention)

CPC: B65D81/3211

European class: B65D81/32B1

US class: 206/221 206/222 206/229 215/45 215/6 215/902 220/23.83 220/254.9 220/271 220/501 220/712 220/713 220/810 220/906 222/129 222/145.5 222/153.07 222/166 222/488 222/570 426/115

Classification Explorer

Cited documents: US8083055 BB, US7377383 BB, US6540112 BA, US6176395 BA, US5108003 A, US5071042 A, US4579257 A, US4576306 A, US3887069 A, US3851800 A, US3335893 A, US3116855 A, US2007138179 AA, US2004007594 AA, GB1241985 A,

Forward Citations: WO15136519, WO15113963, WO13036692, USD731238, US9622605, US9596880, US9199779, US9114910, US9102441, US2016207675, US2016052674, US2016044953, US2016044938, US2015232318, US2015129613, US2014339253, US2013297840, US2009311389, EP2753553, DE102014101073,

Abstract:
Source: US2013146592A A secondary container assembly includes a skirt configured to securely and removably engage the rim of a beverage can. The secondary container includes a secondary compartment holding a secondary liquid. A primary flow channel extends through the secondary container to provide a fluid flow path from the open beverage can to an outlet of the secondary container. A plurality of mixing apertures provide fluid communication ports between the secondary compartment and the primary flow channel, allowing the secondary liquid to mix with beverage from the can in the primary flow channel. A vent tube prevents a vacuum from forming that would otherwise impede flow of the secondary liquid into the primary flow channel. A removable seal covers the outlet and mixing ports. A threaded lid holds the seal in place.

0) US2003053890A – CAN END MANUFACTURING SYSTEM AND PRESS THEREFOR...

95) Family number: 15299324 (US2003053890A) © PatBase

Title: CAN END MANUFACTURING SYSTEM AND PRESS THEREFOR

Priority: US19990387025 19990831 US20020280459 20021024 WO2000US20088 20000721

Family:

Publication number	Publication date	Application number	Application date
AU200063683 A5	20010326	AU20000063683	20000721
BRPI0013627 A	20020514	BR2000PI13627	20000721
BRPI0013627 B1	20120320	BR2000PI13627	20000721
MXPA02001868 A1	20030714	MX2002PA01868	20000721
US2003053890 AA	20030320	US20020280459	20021024
US6533518 BA	20030318	US19990387025	19990831
US6802683 BB	20041012	US20020280459	20021024
WO0115830 A1	20010308	WO2000US20088	20000721

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** FORREST RANDALL G ; REXAM BEVERAGE CAN CO ; TURNER TIMOTHY L ; YOUNG CARLTON

Assignee(s): REXAM BEVERAGE CAN COMPANY ; AMERICAN NATIONAL CAN CO

Inventor(s):(std)**:** FORREST RANDALL G ; TURNER TIMOTHY ; TURNER TIMOTHY L ; YOUNG CARLTON

Inventor(s): CARLTON YOUNG ; RANDALL G FORREST ; TIMOTHY L TURNER ; TIMOTHY TURNER

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

International class (IPC 8–9): B21D51/38 (Advanced/Invention); B21D51/38 (Core/Invention)

International class (IPC 1–7): B21D51/38 B21D51/44

CPC: B21D51/383

European class: B21D51/38B

US class: 413/12 413/14 413/16 413/19 413/56 413/66 413/8

Classification Explorer

Cited documents: US6027436 A, US6022179 A, US5876171 A, US5741105 A, US5511920 A, US5473926 A, US5209098 A, US5158410 A, US5142769 A, US4936729 A, US4854799 A, US4723882 A, US4681001 A, US4640116 A, US4568230 A, US4543811 A, US4424698 A, US4266310 A, US4244315 A, US4136629 A, US4106422 A, US4026226 A, US3981652 A, US3888199 A, US3886881 A, US3366086 A, US3338084 A, US3292412 A, US2601625 A, GB2028179 A1, GB1525957 A,

Forward Citations: US9533800, US9340368, US7344347, US7237999, US7237998, US7234907, US7063492, US7063492, US2015314362, US2008267736, US2006284882, GB2428668, GB2428668, EP1986802, EP1986802, EP1765532,

Abstract:
Source: US2003053890A Ends for cans are made in a single press, eliminating the need for separate shell and conversion presses, balancers, track work, and other equipment, as compared to existing can end manufacturing systems, while reducing floor space and capital investment requirements for installation of a new can end line. A sheet of end material or stock is introduced into the press and fed to a series of work stations. The sheet is maintained in a substantially continuous and void free state as the work stations perform forming operations on the sheet of material to form one or more ends therein. After the forming operation is complete, the end is ejected from the press. The maintenance of the sheet of material in a substantially continuous and void free state permits

precise movement of the sheet through the press, and registration of the sheet relative to the tooling in the press. This precise movement and maintenance of registration results in a single press capable of operation at high speeds to produce large volumes of ends, while doing so in a reliable and cost−effective manner. In a preferred embodiment, the typical shell conversion operations are performed first on the sheet of end material, while maintaining the sheet in a substantially planar and void free state, followed by a shell forming operation in which the panel and countersink features are formed and the completed end blanked in a single stroke at the very end of the forming operations.

0) US3756449A – EASY–OPENING CLOSURES

96) Family number: 3758885 (US3756449A) © PatBase

Title: EASY–OPENING CLOSURES

Priority: AU19690064291 19691125 AU19700000147 19700122 AU19700001489 19700611

Family:

Publication number	Publication date	Application number	Application date
GB1324194 A	19730718	GB19700055897	19701124
US3756449 A	19730904	US19700092472	19701124

Probable Assignee: BROKEN HILL PTY CO LTD

Assignee(s):(std): BROKEN HILL PTY CO LTD

Assignee(s): BROKEN HILL PROPRIETARY CO LTD AU

Inventor(s):(std): SHACKLEFORD R ; DEBENHAM M ; DALLI A

Inventor(s): SHACKLEFORD R AU ; DEBENHAM M AU ; DALLI A AU

International class (IPC 8–9): B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/20 B65D17/24 B65D17/34

CPC: B65D17/24

European class: B65D17/24

US class: 220/270 220/54 D9/438

Classification Explorer

Cited documents: US3089609 A,

Forward Citations: US8834337, US4129085, US2008293477,

Abstract:
Source: US3756449A The disclosure of this specification relates to an easy–opening closure for a can end wherein the closure is defined by a portion of the end which is completely sheared from the end except at a plurality of positions defining retaining means. The material defining the retaining means is cold worked to be in tension, the material being deformed beyond its elastic limit so that removal of the closure is more readily achieved by applying a force to a pull tab connected to the closure. If the can is required to be hermetically sealed, a sealant is applied to at least the completely sheared regions of the can end.

0) US4147271A – DRAWN AND IRONED CAN BODY AND FILLED DRAWN AND ...

97) Family number: 1529077 (US4147271A) © PatBase

Title: DRAWN AND IRONED CAN BODY AND FILLED DRAWN AND IRONED CAN FOR CONTAINING PRESSURIZED BEVERAGES

Priority: CA19770281766 19770630 CA19790338434 19791025 US19770808738 19770622 CA19790338435 19791025 JP19760099296 19760820

Family:

Publication number	Publication date	Application number	Application date
AU197726733 A1	19790111	AU19770026733	19770704
AU513196 B2	19801120	AU19770026733	19770704
BR7704429 A	19780502	BR19770004429	19770706
CA1078309 A1	19800527	CA19770281766	19770630
CA1080641 A2	19800701	CA19790338434	19791025
CA1081629 A1	19800715	CA19790338435	19791025
CA1081629 A2	19800715	CA19790338435	19791025
DE2731876 A1	19780223	DE19772731876	19770714
FR2362057 A1	19780317	FR19770021988	19770718
FR2362057 B1	19841026	FR19770021988	19770718
GB1586986 A	19810325	GB19770026963	19770628
IT1079311 A	19850508	IT19770050276	19770714
JP53025186 A2	19780308	JP19760099296	19760820
MX146667 A	19820726	MX19770169925	19770720
NZ184540 A	19791211	NZ19770184540	19770701
PH15759 A	19830318	PH19770020036	19770727
US4147271 A	19790403	US19770808738	19770622
US4431112 A	19840214	US19790017126	19790305

Probable Assignee: MICHIGAN STATE UNIV BOARD OF TRUSTEES OPERATING

Assignee(s):(std)**:** DAIWA CAN CO LTD

Assignee(s): DAIWA CAN COMPANY LIMITED ; DAIWA CAN CY LTD ; MICHIGAN STATE UNIV ; MICHIGAN STATE UNIV BOARD OF TRUSTEES OPERATING ; YAMAGUCHI HISAKICHI ; DAIWA CAN CO

Inventor(s):(std)**:** HISAKICHI YAMAGUCHI ; YAMAGUCHI H ; YAMAGUCHI HISAKICHI ; YAMAGUCHI KIYUUKICHI

Inventor(s): H YAMAGUCHI

Agent(s): DC; MARKS AND CLERK

International class (IPC 8–9)**:** B65D1/16 B65D17/00 B65D6/34 B65D6/38 B65D88/16 (Advanced/Invention); B65D17/00 (Advanced/Non–invention); B65D1/00 B65D17/00 (Core/Invention)

International class (IPC 1–7)**:** B65D1/16 B65D17/02 B65D17/06 B65D17/08 B65D17/16 B65D25/24 B65D6/12 B65D7/04 B65D7/42 B65D7/44 B65D7/46 B65D7/48 B65D8/04 B65D8/12 B65D81/20 B65D85/72

CPC: B65D1/165

European class: B65D1/16B

US class: 220/1BC 220/606 220/609 220/66 220/70

Classification Explorer

Cited documents: US800408 A, US4147271 A, US4120419 A, US3998174 A, US3979009 A, US3973693 A, US3905507 A, US3904069 A, US3878963 A, US3693828 A, US3603275 A, US3428239 A, US3409167 A, US3400853 A, US3394837 A, US3288342 A, US3105765 A, US2971671 A, US2894844 A, US2339763 A, US1987817 A, US1963795 A, US1499239 A, GB488427 A, FR838146 A, FR694190 A, DE2100053 A1, DE2049554 A1, CH399218

A, CH154127 A, CA969114 A1, BE555872 A, BE532675 A, AU5381373 A1, AU5381373, AT200993 B,

Forward Citations: WO9962765, WO9324377, WO9312975, WO8602026, WO08057207, WO0154983, USD739732, USD739731, US9555459, US9463900, US9394072, US9334078, US9260217, US9150320, US8998026, US8960472, US8833579, US8616395, US8590729, US8276774, US7451886, US7150372, US6942116, US6640149, US6616393, US6286705, US6220073, US6131761, US6077554, US5730314, US5727710, US5697242, US5685449, US5680952, US5540352, US5524468, US5492245, US5351852, US5325696, US5234126, US5222385, US5217737, US4953738, US4732031, US4722215, US4609118, US4606472, US4580690, US4560063, US4541265, US4485663, US4431112, US4402419, US2014124473, US2013206719, US2013153529, US2013087561, US2013043209, US2013032602, US2011017700, US2010059530, US2009242575, US2009159556, US2009090646, US2006006133, US2005196569, US2004232103, JP61093038, JP61043109, JP60047240, JP57067924, JP2016027984, JP1228216, GB2119743, FR2499884, FR2384676, EP1369355, EP1127795, EP0906222, EP0906222, EP0417436, EP0235918,

Abstract:
Source: US4147271A A drawn and ironed can body with integral bottom and a drawn and ironed can seamed with a top closure at the opening end are designed for packaging pressurized beverages and made of a sheet material thinner than that heretofore used for conventional drawn and ironed cans, and the top closure and the bottom resist buckling as might be caused by the actual internal pressure produced therein.

0) US3490643A – FULL OPENING CONTAINER END

98) Family number: 17935685 (US3490643A) © PatBase

Title: FULL OPENING CONTAINER END

Priority: DE19691903107 19690122 DK19690000296 19690120 FR19690001022 19690121 FR19700024992 19700706 NO19690000220 19690121 NO19710002841 19710727 US19680699550 19680122

Family:

Publication number	Publication date	Application number	Application date
AT294683 B	19711125	AT19690000609	19690121
AT309314 B	19730810	AT19700011308	19690121
BE727233 A	19690722		19690122
CH485557 A	19700215	CH19690000843	19690121
DE1903107 A1	19691113	DE19691903107	19690122
DE1966033 A1	19710616	DE19691966033	19690122
DE1966033 C3	19841025	DE19691966033	19690122
DE7039878 U	19710826	DE19700039878U	19690122
DK132269 B	19751117	DK19690000296	19690120
DK132269 C	19760426	DK19690000296	19690120
DK133137 B	19760329	DK19730000706	19730209
DK133137 C	19760830	DK19730000706	19730209
ES362713 A1	19701216	ES19690362713	19690120
FI51579 B	19761101	FI19690000162	19690120
FI51579 C	19770210	FI19690000162	19690120
FR2000528 A1	19690912	FR19690001022	19690121
FR2104719 A1	19720421	FR19700024992	19700706
FR2104719 B1	19730810	FR19700024992	19700706
GB1263091 A	19720209	GB19690003059	19690120
GB1263092 A	19720209	GB19710046227	19690120
IL31442 A0	19690327	IL19690031442	19690119
IL31442 A1	19730730	IL19690031442	19690119
LU57803 A	19690513		19690120
NL158132 B	19781016	NL19690000923	19690120
NL6900923 A	19690724	NL19690000923	19690120
NO123629 B	19711220	NO19690000220	19690121
NO123630 B	19711220	NO19710002841	19710727
OA3629 A	19711224	OA19690053479	19690117
SE350457 B	19721030	SE19690000854	19690122
SE379022 B	19750922	SE19720007624	19690122
SE379022 C	19760115	SE19720007624	19690122
US3490643 A	19700120		19680122

Probable Assignee: DORN CO V

Assignee(s):(std)**:** CEBAL G P ; CEBAL GP ; CEBAL GP PARIJS ; CEBAL GP PARIS ; DORN CO V

Assignee(s): VAN DORN CO ; BANKERS TRUST CO ; CEBAL GP PARIS FR

Inventor(s):(std)**:** JOSEPH SCALIA MASSILLON ; MC CUSKEY J ; MC CUSKY J ; MCCLUSKEY JAMES R ; MCCUSHKEY JAMES ; MCCUSKEY J ; MCCUSKEY JAMES ; PLANCE G ; PLANCE GEORGE ; PLANCE GEORGE L ; SCALIA JOSEPH ; SCALLA JOSEPH ; JOSEPH SCALIA ; JAMES MCCUSKEY ; HENNING GEORGE J ; HENNING G ; GEORGE PLANCE ; GEORGE HENNING GEORGE HENNING ; GEORGE HENNING ; CUSKEY J M ; SCALIA J ; PLANCE GEORGE LEONARD ; PLANCE G L ; MCCUSKEY JAMES ROBERT ; MCCUSKEY J R ; CUSKEY JAMES MC ; HENNING GEORGE ; JAMES MC

	CUSKEY CANTON ; HENNING GEORGE JOHN ; HENNING G J
Inventor(s):	JAMES R MCCLUSKEY ; JAMES MC CUSKEY ; MCCUSHKEY JAMES CANTON OHIO US ; GEORGE L PLANCE ; GEORGE J HENNING ; SCALIA JOSEPH MASSILLON OHIO US
Agent(s):	REINHOLD COHN AND PARTNERS
International class (IPC 8–9):	B65D21/00 B65D21/02 (Advanced/Invention); B65D21/00 B65D21/02 (Core/Invention)
International class (IPC 1–7):	B65D17/00 B65D17/06 B65D17/16 B65D17/20 B65D17/24 B65D21/00 B65D21/02 B65D51/00
CPC:	B65D17/163 B65D21/02
European class:	B65D17/16B1 B65D21/02
US class:	206/508 220/273 220/54 D9/438
Classification Explorer	
Cited documents:	US3406866 A, US3381848 A, US3366270 A, US2723778 A, LU57803 A, FR1215451 A, DE1805554 A1, DE1745591 A1,
Forward Citations:	WO9630269, USRE28776, US8684211, US4116361, US4116360, US3905514, US3799390, US3785522, US3762596, US3682350, US3655091, FR2602485, FR2502122, FR2395199, FR2395199, FR2395198, FR2395198, FR2104719, EP0262767, EP0261776, EP0256920, EP0061980, DE2727743,

Abstract:
Source: US3490643A ABSTRACT OF THE DISCLOSURE An end wall member for a metal container or can formed with an end–panel–defining score line immediately adjacent the can side wall is provided with a ring pull 15 tab for severing the can end along the score line to remove the entire end panel so that the contents of the can may be removed readily. The pull tab has special formations for readily severing the end panel along the score line. The can end has special formations facilitat– 20 ing easily peeling the end panel from the can and mini–mizing any tendency of the end panel to dip into the contents of the can during end panel removal. The can end also is provided with formations to prevent damage thereto from movement of the can end during heating 25 and processing of food in the sealed can. B

0) US3717279A – NONDETACHABLE TEAR STRIP WITH WING TAB

99) Family number: 1367272 (US3717279A) © PatBase

Title: NONDETACHABLE TEAR STRIP WITH WING TAB

Priority: AU19730051327 19730122 US19720221205 19720127 US19720221214 19720127

Family:

Publication number	Publication date	Application number	Application date
AU197351327 A1	19740725	AU19730051327	19730122
AU475044 B2	19760812	AU19730051327	19730122
CA992890 A1	19760713	CA19730162162	19730126
CA992891 A1	19760713	CA19730162163	19730126
DE2303859 A1	19730816	DE19732303859	19730126
GB1375678 A	19741127	GB19730003585	19730124
IT977080 A	19740910	IT19730047924	19730126
JP48086679 A2	19731115	JP19730010955	19730126
SE383135 B	19760301	SE19730001046	19730125
SE383135 C	19760610	SE19730001046	19730125
US3717279 A	19730220	US19720221205	19720127
US3738526 A	19730612	US19720221214	19720127

Probable Assignee: NAT CAN CORP

Assignee(s):(std)**:** NAT CAN CORP

Assignee(s): NAT CAN CORP US ; NATIONAL CAN CORP ; NATIONAL CAN CORP CHICAGO ILL V ST A ; NICKEL WARREN A ; PATARINI LEON M ; ZUNDEL ARTHUR P ; AMERICAN NATIONAL CAN CORP ; KRATOCHVIL FRANK

Inventor(s):(std)**:** KRATOCHVIL F ; NICHEL W A ; NICKEL W ; NICKEL W A ; KRATOCHVIL FRANK ; NICKEL WARREN A ; PATARINI L ; PATARINI L M ; PATARINI LEON M ; ZUNDEL A ; ZUNDEL A P ; ZUNDEL ARTHUR P

Inventor(s): ZUNDEL ARTHUR P CARY ; ZUNDEL A US ; PATARINI LEON M PALOS HILLS ; WARREN A NICKEL ; PATARINI L US ; NICKEL WARREN A CHICAGO ; KRATOCHVIL FRANK STICKNEY ; LEON M PATARINI ; NICKEL W US ; KRATOCHVIL F US ; ARTHUR P ZUNDEL ; ARTHUR P ZUNDEL LEON M PATARINI WARREN A NICKEL AND FRANK KRATOCHVIL ; FRANK KRATOCHVIL

International class (IPC 8–9): B65D17/32 B65D17/34 B65D17/347 B65D17/35 B65D17/353 B65D41/42 (Advanced/Invention); B65D17/28 B65D41/32 (Core/Invention); B65D (Subclass/Invention)

International class (IPC 1–7): B65D17/16 B65D17/18 B65D17/20 B65D17/24 B65D17/32 B65D17/34 B65D41/42

CPC: B65D17/16 B65D17/165

European class: B65D17/16 B65D17/16B2

US class: 220/269 220/275 220/54 D9/438

Classification Explorer

Cited documents: US3653535 A, US3618815 A,

Forward Citations: WO9014280, WO07147542, US9272823, US8556104, US6286703, US5975327, US5894950, US5411159, US4992128, US4915290, US4913294, US4852740, US4537326, US4491236, US4402421, US4184605, US4061243, US3994411, US3952914, US3952912, US3927795, US3923193, US3894651, US3877606, US3874555, US2015353229, US2013284742, US2012248113, US2011006062, US2010213194, US2009206083, JP58121830, JP57167024, JP50130589, FR2393733, EP0080775, EP0080775, EP0019373, DE3204974, DE2623704, DE2352737,

Abstract:
Source: US3717279A ABSTRACT OF THE DISCLOSURE A container end panel is formed with a score line de−ìning a tear strip permanently attached at one end to the panel. A tab has deflectable fingers extending

later−ally outwardly along opposite sides adjacent the connect−ing means to maintain the connecting end of the tab with−in the container after pivotai movement of the tab to institute severing of the score line. The opening in the panel created by the score line has a reduced portion adjacent the permanent connection between the panel and the tear strip while the tab has an enlarged portion on the connecting end and a reduced portion intermediate the ends that is received into the reduced portion of the opening so that the tab is guided along the opening to a stored position adjacent the permanent connection while the tear strip is bent intermediate its ends and is essen−tially folded upon itself to be located within the container when the panel has been fully opened. B

0) US5626228A – THIN–WALLED CAN HAVING PLURALITY OF SUPPORTING ...

100) Family number: 10320515 (US5626228A) © PatBase

Title: Thin–walled can having plurality of supporting feet with two support features

Priority: US19960561295 19960501 US19960640461 19960501 WO1997US06386 19970418

Family:

Publication number	Publication date	Application number	Application date
AT261857 E	20040415	AT19970922332T	19970418
AU199728035 A1	19971119	AU19970028035	19970418
BRPI9708896 A	20000104	BR1997PI08896	19970418
CA2252653 AA	19981026	CA19972252653	19970418
CA2252653 C	20030107	CA19972252653	19970418
CN1073951 C	20011031	CN19971095756	19970418
CN1229392 A	19990922	CN19971095756	19970418
DE69728145 D1	20040422	DE19976028145	19970418
EP0907567 A1	19990414	EP19970922332	19970418
EP0907567 A4	20020904	EP19970922332	19970418
EP0907567 B1	20040317	EP19970922332	19970418
ES2217417 T3	20041101	ES19970922332T	19970418
HK1022460 A1	20020517	HK20000101450	20000308
JP2002515842 T2	20020528	JP19970538950T	19970418
US5626228 A	19970506	US19960640461	19960501
WO9741039 A1	19971106	WO1997US06386	19970418

Probable Assignee: ANHEUSER BUSCH LLC

Assignee(s):(std)**:** ANHAUSER BUSCH INC ; ANHEUSER BUSCH

Assignee(s): ANHEUSER BUSCH INC ; ANHEUSER BUSCH LLC ; HENKELMANN DAVID H ; WIEMANN DAVID J

Inventor(s):(std)**:** HENKELMANN D H ; HENKELMANN DAVID H ; HENKELMANN H ; WIEMANN D J ; WIEMANN DAVID J ; WIEMANN J

Inventor(s): D H HENKELMANN ; D J WIEMANN ; DAVID H HENKELMANN ; DAVID J WIEMANN

Agent(s): KIRBY EADES GALE BAKER

Designated states: AT AU BE BR CA CH CN CZ DE DK ES FI FR GB GR IE IT JP LI LU MC NL PT SE SK

International class (IPC 8–9)**:** B65D1/02 B65D1/16 B65D1/26 B65D21/02 B65D21/032 B65D25/20 B65D8/00 (Advanced/Invention); B65D1/02 B65D8/00 (Advanced/Non–invention); B65D1/00 B65D1/02 B65D1/22 B65D21/02 B65D8/00 (Core/Invention)

International class (IPC 1–7)**:** B02C1/02 B65D B65D1/02 B65D1/16 B65D21/02 B65D21/032 B65D25/20 B65D8/00 H04N7/52

CPC: B65D1/165 B65D21/0215 B65D1/26

European class: B65D1/16B B65D1/26 B65D21/02E5

US class: 206/511 220/606

Classification Explorer

Cited documents: USD269066 S1, USD257463 S1, USD254957 S1, US4834256 A, US4732292 A, US4685582 A, US4646930 A, US4264017 A,

Forward Citations: WO11027910, WO0153160, WO0153160, USD609564, US8993021, US7185525, US6112924, US2015158624, US2013256180, US2012156335, US2009194561, US2005028576, JP2013542896, JP2011068361, JP2011051625, JP2006327655, EP2640646, CN103979179,

Abstract:
Source: US5626228A A metal container for holding fluids is provided having a bottom wall including a externally convex dome portion and a plurality of supporting feet formed therein. The supporting feet are circumferentially spaced apart from each other and projected generally downward beyond the dome portion. Each supporting foot has formed thereon stand features and stacking features. The stand features are radially spaced from the longitudinal axis of the container and disposed at downwardmost locations on the feet to alone support the container in an upright position on a flat horizontal surface when the container is not internally pressurized. The stacking features are disposed adjacent to the stand features and define, in cross−sectional elevation view, axial stacking surfaces and radial stacking surfaces. The axial stacking surfaces are axially positioned in relation to stand features and the radial stacking surfaces are radially positioned in relation to the longitudinal axis so as to interfit with an upper seamed edge of an adjacent below container to alone provide for stacking engagement when the container is not internally pressurized. Since the bottom wall does not rely on any large−radius externally concave mechanical features to resist internal pressurization, a thinner gauge metal can be used to satisfy design parameters and can achieve cost and metal reduction savings. The profile of the bottom wall also results in very small values for profile deformation and changes in can dimensions over a wide range of internal pressures.

0) US5272011A – COPOLYESTER RESIN FILM LAMINATED METAL SHEET

101) Family number: 11395502 (US5272011A) © PatBase

Title: COPOLYESTER RESIN FILM LAMINATED METAL SHEET

Priority:

CA19840465079 19841010
DE19843436412 19841004
FR19890014215 19891030
DE19904009839 19900327
DE19893925141 19890728
US19910815646 19911230
US19920839726 19920219
CA19890606025 19890718
DE19843436412 19841004
FR19900004031 19900329
FR19890010727 19890809
GB19890025353 19891109
US19890419217 19891011
GB19900006126 19900319
CA19892000356 19891010
CA19902013162 19900327
GB19890016565 19890720
DE19893934904 19891019
JP19880075837 19880331
GB19890025353 19891109
US19900494634 19900316

Family:

Publication number	Publication date	Application number	Application date
CA1246980 A1	19881220	CA19840465079	19841010
CA1339459 A1	19970916	CA19890606025	19890718
CA2000356 AA	19910410	CA19892000356	19891010
CA2000356 C	19950822	CA19892000356	19891010
CA2013162 AA	19910927	CA19902013162	19900327
CA2013162 C	19950926	CA19902013162	19900327
DE3436412 A1	19860417	DE19843436412	19841004
DE3436412 C2	19880421	DE19843436412	19841004
DE3925141 A1	19910131	DE19893925141	19890728
DE3925141 C2	19980430	DE19893925141	19890728
DE3934904 A1	19910502	DE19893934904	19891019
DE3934904 C2	19941013	DE19893934904	19891019
DE4009839 A1	19911002	DE19904009839	19900327
DE4009839 C2	19940203	DE19904009839	19900327
FR2650779 A1	19910215	FR19890010727	19890809
FR2650779 B1	19911227	FR19890010727	19890809
FR2653703 A1	19910503	FR19890014215	19891030
FR2653703 B1	19920724	FR19890014215	19891030
FR2660240 A1	19911004	FR19900004031	19900329
FR2660240 B1	19940121	FR19900004031	19900329
GB2234704 A1	19910213	GB19890016565	19890720
GB2234704 B2	19930414	GB19890016565	19890720
GB2238507 A1	19910605	GB19890025353	19891109
GB2238507 B2	19930825	GB19890025353	19891109
GB2242159 A1	19910925	GB19900006126	19900319
GB2242159 B2	19940202	GB19900006126	19900319
GB8916565 A0	19890906	GB19890016565	19890720
GB8925353 A0	19891228	GB19890025353	19891109
GB9006126 A0	19900516	GB19900006126	19900319
JP1249331 A2	19891004	JP19880075837	19880331
JP1851807 C3	19940621	JP19880075837	19880331
JP5071035 B1	19931006	JP19880075837	19880331
JP5071035 B4	19931006	JP19880075837	19880331
US5272011 A	19931221	US19910815646	19911230
US5330605 A	19940719	US19920839726	19920219

Probable Assignee: TOYO KOHAN CO LTD

Assignee(s):(std)**:** TOYO KOHAN CO LTD

Assignee(s): TOYO KOHAN CO LTD TOKIO TOKYO JP ; HANABUSA TETSUHIRO ; INUI TSUNEO ; KOJO HARUNORI ; KUBOTA HARUNORI ; TANAKA ATSUO ; TOYO KOHAN CO

Inventor(s):(std) ATSUO TANAKA ; HANABUSA AKIHIRO ; HANABUSA TETSUHIRO ; HARUNORI KOJO ; INUI TSUNEO ; KOJO HARUNORI ; KUBOTA HARUNORI ; TANAKA ATSUO ; TETSUHIRO HANABUSA ; TSUNEO INUI

Inventor(s): TANAKA ATSUO TOKUYAMA YAMAGUCHI JP ; KUBOTA HARUNORI HIKARI YAMAGUCHI JP ; KOJO HARUNORI YAMAGUCHI JP ; INUI TSUNEO TOKUYAMA YAMAGUCHI JP ; HANABUSA TETSUHIRO KUDAMATSU YAMAGUCHI JP ; HANABUSA TETSUHIRO TOKUYAMA YAMAGUCHI JP

Agent(s): OGILVY RENAULT LLP SENCRL SRL

International class (IPC 8–9): B05D7/14 B32B15/08 B32B15/09 B32B27/36 B65D25/14 B65D65/42 C08J5/12 C08J7/04 C08L67/02 (Advanced/Invention) ; B05D7/14 B32B15/08 C08J5/12 C08J7/00 C08L67/00 (Core/Invention)

International class (IPC 1–7): B05D7/16 B05D7/26 B21B3/00 B21C37/09 B21D22/20 B21D51/26 B29C63/00 B29C63/02 B29C65/44 B29D9/00 B29K67/00 B32B15/08 B32B15/18 B32B27/36 B32B31/04 B32B31/08 B32B31/20 B32B31/26 B32B33/00 B32B7/04 B32B7/12 B65D1/10 B65D1/12 B65D17/00 B65D8/04 B65D81/18 B65D81/34 B65D85/72 C04B35/46 C08J5/12 C08J5/18 C08J7/04 C08J7/12 C08L67/02 C09J5/06 C23C22/23 C23C22/24 C23F17/00 C25D3/04 C25D3/30 C25D7/06

CPC: B65D25/14 B65D65/42 C08J5/125 Y10S428/91 C08J5/128 B05D7/14 B32B15/08 C08J5/124 C08J2367/02 C08J2463/00 C08L67/02 Y10T428/31529 Y10T428/31605 Y10T428/31681 Y10T428/31786

European class: B05D7/14 B32B15/08 B65D25/14 B65D65/42 C08J5/12H C08J5/12H2 C08J5/12H6 C08J7/04L C08L67/02 M08J367/02 M08J463/00

US class: 156/309.9 156/321 156/322 156/324 220/410 220/62.12 220/62.22 428/418 428/425.8 428/458 428/469 428/480 428/910

Classification Explorer

Cited documents: WO8903303 A1, US5094924 A, US5059460 A, US4957820 A, US4939232 A, US4698195 A, US4686152 A, US4677188 A, US4614691 A, US4533576 A, US4517255 A, US3870594 A, US3647592 A, US2961365 A, US2861022 A, JP63075537 A2, JP63013829 A2, JP62286734, JP6120736 A2, JP61149341 A2, JP61149341, JP61149340 A2, JP61089826 A2, JP61020736 A2, JP6047103 B2, JP60168643 A2, JP60047103 A2, JP59046786 A2, JP58183249, JP58082712 A2, JP56149341 A2, JP56010451, JP53141786 A2, JP3008066 A2, JP1022530, JP10192545 A2, JP10136738 A2, GB857933 A, GB2238981 A1, GB2238507 A1, GB2234704 A1, GB2224238 A1, GB2211139 A1, GB2164899 A1, GB2123746 A1, GB2055687 A1, GB1566422 A, GB1531413 A, GB1495659 A, GB1478979 A, GB1443109 A, GB1329723 A, FR2638429 A1, FR2585732 A1, FR2571659 A1, FR2216107 A1, FR1355761 A, FR1226150 A, EP0436739 A1, EP0322529 A1, EP0209393 A2, EP0144878 A2, EP0084827 A2, EP0046444 A2, EP0044515 B1, EP0034781 A1, DE3839881 A1, DE3836858 A1, DE3640662 A1, DE3634885 A1, DE3629382 A1, DE3606430 A1, DE3436412 C2, DE3436412 A1, DE3432118 A1, DE3227282 A1, DE3206183 A1, DE3151115 A1, DE2939986 A1, DE2918553 C2, DE2634868 A1, DE2418027 A1, DE1092145 B,

Forward Citations: WO9703823, US9506152, US9358766, US7942991, US6482526, US6150012, US6106658, US6080260, US6045905, US6017599, US5964113, US5888599, US5882784, US5874163, US5753328, US5714273, US5705240, US5674627, US5582319, US5470429, US5424121, US5389451, US5372867, US5300335, US5137762, US2014162055, RU2590546, NL9400154, JP6320669, JP4113475, JP3212433, JP2004122765, GB2309931, GB2309931, GB2303330, GB2303330, GB2242159, FR2715344, FR2709089, FR2695865, FR2638429, EP2845929, EP1992477, EP1992477, EP0848664, EP0845350, EP0798112, EP0798110, EP0798110, EP0791453, EP0666169, EP0664209, EP0608632, EP0574232, EP0574232, EP0562611, EP0544545, EP0532168, EP0474240, DE4447776, DE4403174, DE4403174, DE4337062, DE4329826, DE4329826, DE4311481, DE4232251, DE4222464, DE4029553, DE4029553, DE4022361, DE4009839, DE3934904, DE3925141, DE3925141, DE3836858, DE19504678, DE19504678, DE102013109801, DE102005015340, DE102005015340, CN102582161,

Abstract:
Source: US5272011A A copolyester resin film laminated metal sheet having excellent formability and a method for its production is disclosed. This disclosure comprises laminating a biaxially oriented copolyester resin film having specified characteristics, to one or both sides of a surface treated metal sheet, which has been heated to the melting point of the copolyester resin film +/−50 DEG C., just before the lamination of the copolyester resin film. This film has been precoated with a resin composite containing in its molecular structure at least one radical, such as epoxy radical and hydroxyl radical. The side of the copolyester resin film pre−coated with resin composite is in

contact with the surface treated metal sheet. This copolyester resin film laminated metal sheet is suitable for some applications in which severe formability is required, such as deeply drawn cans formed by multiple drawings, drawn and partially ironed cans, drawn and stretch formed cans, can ends wherein a tab for easy opening is attached, screwed caps and crown caps.

0) US3894652A – EASY–OPEN CAN END CONSTRUCTION

102) Family number: 1153155 (US3894652A) © PatBase

Title: Easy–open can end construction

Priority: US19720236654 19720321

Family:

Publication number	Publication date	Application number	Application date
US3894652 A	19750715	US19720236654	19720321

Probable Assignee: FRAZE ERMAL C

Assignee(s):(std)**:** FRAZE ERMAL C

Assignee(s): FRAZE MARTHA L ; DAYTON RELIABLE TOOL AND MFG CO

Inventor(s):(std)**:** BROWN OMAR L

International class (IPC 8–9): B65D41/32 (Advanced/Invention); B65D41/32 (Core/Invention)

International class (IPC 1–7): B65D17/24 B65D41/32

CPC: B65D17/163

European class: B65D17/16B1

US class: 220/270 220/712

Classification Explorer

Cited documents: US3819083 A, US3809283 A,

Forward Citations: USRE33217, US9617056, US7495185, US4909407, US4832223, US4445621, US4088242, US4055134, US2009261099, US2007200418, FR2701924, EP0553514, EP0514734,

Abstract:
Source: US3894652A An easy–open can end having a tear portion circumscribed by a line of weakness and a pull tab connected to the tear portion in which a rib projects from the surface of the tear portion. The rib includes an upstanding sidewall which is positioned in contiguous relation to the line of weakness. The shape of the sidewall and its position with respect to the line of weakness provide shielding of the line of weakness. As a result, when the tear portion is removed from the can end by severing along the line of weakness, the edge of the tear portion is shielded from user–contact by the sidewall.

0) US4673099A – RECLOSABLE SELF–OPENING CAN END

103) Family number: 3223831 (US4673099A) © PatBase

Title: Reclosable self–opening can end

Priority: US19820410422 19820823 US19870057222 19870602 US19880207141 19880615 US19890339086 19890414 US19890339085 19890414

Family:

Publication number	Publication date	Application number	Application date
US4673099 A	19870616	US19820410422	19820823
US4821912 A	19890418	US19870057222	19870602
US4865215 A	19890912	US19880207141	19880615
US4877129 A	19891031	US19890338989	19890414
US4880137 A	19891114	US19890339086	19890414
US4887712 A	19891219	US19890339085	19890414

Probable Assignee: WELLS ROBERT A

Assignee(s):(std)**:** WELLS ROBERT A

Assignee(s): WELLS VERA T ; WELLS VERA T DENVER CO

Inventor(s):(std)**:** WELLS ROBERT A

International class (IPC 8–9): B65D17/32 B65D41/32 (Advanced/Invention); B65D17/28 B65D41/32 (Core/Invention)

International class (IPC 1–7): B65D41/32

CPC: B65D17/166 B65D2517/0011 B65D2517/0014 B65D2517/0017 B65D2517/0034 B65D2517/0052

European class: B65D17/16B2B L65D517/00Y2A L65D517/00Y2C L65D517/00Y2E L65D517/00Y5A1 L65D517/00Y6B

US class: 206/269 220/231 220/255.1 220/258 220/258.4 220/258.5 220/267 220/268 220/269 220/273 220/277 220/278 220/288

Classification Explorer

Cited documents: US4673099 A, US4574975 A, US4463866 A, US4442950 A, US4433792 A, US4391385 A, US4276263 A, US4238046 A, US4238040 A, US4232797 A, US4227614 A, US4226330 A, US4215791 A, US4210257 A, US4207991 A, US4189060 A, US4039101 A, US4003493 A, US4000996 A, US3983994 A, US3950158 A, US3880319 A, US3874504 A, US3871552 A, US3871550 A, US3871548 A, US3807597 A, US3804287 A, US3756389 A, US3627611 A, US3608709 A, US3298597 A, US3281024 A, US3189174 A, US3186628 A, US3182728 A, US2991000 A, US2294102 A,

Forward Citations: WO9955591, WO9833720, WO9722531, WO9504683, WO9424006, WO9220584, WO9218394, WO9204262, WO9110600, WO9109784, WO16132287, WO15188974, WO15148242, WO12160221, WO12160221, WO12150301, WO12010258, WO11124552, WO11107558, WO10080047, WO10000340, WO07076827, WO06053922, WO06009483, WO05108234, WO05108234, WO05090174, WO04089768, WO04089768, WO03004365, WO0183303, WO0001587, WO0001587, USD708516, USD708060, USD625184, US9637269, US9637267, US9463910, US9398822, US9315290, US9272819, US9186924, US9156585, US8985371, US8931656, US8844747, US8833585, US8783496, US8651318, US8640905, US8469218, US8434635, US8336726, US8336725, US8245866, US8240498, US8215513, US8146768, US7987621, US7918359, US7909196, US7757889, US7735673, US7617622, US7500577, US7407061, US7152753, US7089825, US6926487, US6926456, US6910598, US6889507, US6872913, US6868627, US6763963, US6739471, US6626314, US6576871, US6575684, US6479787, US6476349, US6455806, US6427861, US6347720, US6286703, US6244455, US6220470, US6164480, US6106757, US6059137, US5826737, US5819923, US5813559, US5779087, US5743445, US5711448, US5653355, US5437400, US5431296, US5385254, US5316166, US5148935, US5080249, US5065881, US4991732, US4982862, US4979635, US4957216, US4951835, US4948008, US4932555, US4928844, US4865215, US4773557, US2014367381, US2014048549, US2014042164, US2013075296, US2012012586, US2011233227, US2011226636, US2011163096, US2011031247,

US2011011868, US2010294768, US2010219187, US2010193519, US2010058630, US2009179033, US2009173737, US2009095752, US2009078703, US2009057315, US2009026201, US2009001092, US2008272120, US2008110887, US2008047962, US2007262079, US2007131690, US2007068943, US2007062946, US2007045318, US2007023441, US2006249511, US2006175332, US2006163254, US2005284263, US2005282066, US2005258175, US2005252917, US2005236411, US2005160650, US2005051552, US2004259235, US2004256388, US2003178397, US2003155360, US2003080130, TWI439396, RU2559140, KR101317061, JP2011526230, JP2006522721, GB2426970, GB2424872, GB2379917, GB2326630, GB2320008, GB2320008, GB2305657, GB2278335, GB2258208, GB2258208, GB2255081, GB2246342, GB2246342, FR2826940, FR2826939, ES2246635, EP3009369, EP2502838, EP2409925, EP2197755, EP2197755, EP1491453, EP0513401, DE3840251, DE102011010602, DE102010010013, DE102008044981, CN103003164, CN103003164, CN102917958, CN102917958, CN102123917, BE1018870, AU2011281959, AU2008358819, AU2006332286, AT504645, AP1075,

Abstract:
Source: US4673099A An easy−open beverage container which can be selectably reclosed and reopened, after the container initially is opened. The reclosure structure may be contained on an opening tab, or alternatively may be separate from the tab.

104) Family number: 2360082 (CA1169372A) © PatBase

Title: EASY OPEN CAN END CONSTRUCTION AND METHOD OF MAKING SAME

Priority: CA19810384022 19810817

Family:

Publication number	Publication date	Application number	Application date
CA1169372 A1	19840619	CA19810384022	19810817

Probable Assignee: CVACHO DANIEL S

Assignee(s):(std)**:** CVACHO DANIEL S

Inventor(s):(std)**:** CVACHO DANIEL S

Agent(s): MACRAE AND CO

International class (IPC 8–9)**:** B65D17/28 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7)**:** B65D17/28

Classification Explorer

Abstract:
Source: CA1169372A An easy open can end construction and method of making it. The pull tab and tear strip remain fully locked onto the can end, and the opening strip does not dip into the beverage. Blend members positioned externally of the tear strip not only preserve a desired orientation of the pull tab with respect to the tear strip by also serve as a guard against the user's face or tongue contacting the raw edge left after lifting the tear strip. The tear strip itself is provided with one or more protective pads to protect the user's face. A sanitary cover member overlies the tear strip and is rolled up with the pull tab and tear strip becoming interlocked therewith. A method of making the score line pattern is included so that tearing occurs along a single side of the bottom of the score line pattern to avoid a zigzag tear pattern which is dangerous to the user's tongue or lips. Finally, a method of making a rivet is included in which two metal thickness are joined together to avoid a leaking problem encountered in single metal thickness rivets.

0) US2002185527A – CARTON WITH ARTICLE DISPENSER

105) Family number: 30115523 (US2002185527A) © PatBase

Title: CARTON WITH ARTICLE DISPENSER

Priority: EP20010990717 20011114 US20000712871 20001115 US20020206165 20020726 WO2001US44149 20011114

Family:

Publication number	Publication date	Application number	Application date
AT331668 E	20060715	AT20010990717T	20011114
AU2002230480 AA	20020527	AU20020230480	20011114
AU2002230480 BB	20060921	AU20020230480	20011114
AU200230480 A5	20020527	AU20020030480	20011114
BRPI0115428 A	20030916	BR2001PI15428	20011114
CA2432587 AA	20030515	CA20012432587	20011114
CA2432587 C	20070807	CA20012432587	20011114
DE60121205 D1	20060810	DE20016021205	20011114
DE60121205 T2	20070516	DE20016021205T	20011114
DK1335860 T3	20061030	DK20010990717T	20011114
EP1335860 A2	20030820	EP20010990717	20011114
EP1335860 B1	20060628	EP20010990717	20011114
EP1698565 A2	20060906	EP20060009955	20011114
EP1698565 A3	20080416	EP20060009955	20011114
ES2267847 T3	20070316	ES20010990717T	20011114
JP2004524222 T2	20040812	JP20020542696T	20011114
JP4112977 B2	20080702	JP20020542696T	20011114
MXPA03004323 A1	20050701	MX2003PA04323	20011114
PT1335860 T	20061130	PT20010990717T	20011114
US2002185527 AA	20021212	US20020206165	20020726
US6478219 BA	20021112	US20000712871	20001115
US6669083 BB	20031230	US20020206165	20020726
WO0240358 A2	20020523	WO2001US44149	20011114
WO0240358 A3	20020912	WO2001US44149	20011114

Probable Assignee: MEADWESTVACO PACKAGING SYSTEMS LLC

Assignee(s):(std): BATES AARON ; HOLLEY JOHN M JR ; MEAD CORP ; MEADWESTVACO PACKAGING SYSTEMS

Assignee(s): MEADWESTVACO PACKAGING SYSTEMS LLC ; MW CUSTOM PAPERS INC ; MW CUSTOM PAPERS LLC

Inventor(s):(std): BATES AARON ; HOLLEY JOHN M JR ; HOLLEY JR JOHN M ; HOLLEY M

Inventor(s): HOLLEY JOHN M ; JOHN M HOLLEY JR ; JOHN M JR HOLLEY ; AARON BATES

Agent(s): SPRUSON AND FERGUSON; RIDOUT AND MAYBEE LLP; BALDWIN MARK ET AL

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

International class (IPC 8–9): B65D5/00 B65D5/10 B65D5/46 B65D5/462 B65D5/54 B65D71/00 B65D71/34 B65D71/36 B65D75/62 (Advanced/Invention)

International class (IPC 1–7): B65D17/00 B65D5/00 B65D5/10 B65D5/462 B65D5/54 B65D71/00

CPC:

Y10S206/815 Y10S229/925 B65D71/36 B65D2571/00141 B65D2571/00172 B65D2571/00469 B65D2571/00543 B65D2571/00549 B65D2571/00586 B65D2571/0066 B65D2571/00728 B65D2571/00759

European class: B65D71/00C1B B65D71/00CA1B B65D71/36 L65D571/00Y1A1 L65D571/00Y1A3B L65D571/00Y4B2 L65D571/00Y4S1 L65D571/00Y4S2 L65D571/00Y5A4A1 L65D571/00Y6A1 L65D571/00Y7B1 L65D571/00Y7B6

US class: 206/155 206/815 221/305 229/160.2 229/237 229/240 229/240P 229/241 229/242 229/925

Classification Explorer

Cited documents: WO9721607 A1, USD263204 S1, USD237144 S1, US6176419 BA, US5368194 A, US5344066 A, US4735315 A, US4623074 A, US4550834 A, US4417661 A, US4396143 A, US4364509 A, US4216861 A, US3894681 A, US3692227 A, US3578238 A, US3404828 A, US3326364 A, US3263861 A, US3189215 A, US3141596 A, US3131847 A, US3019944 A, US2974846 A, US2933229 A, US2145181 A, JP7502717, JP63049317 U, JP55139026 U, JP3133737, JP07502717, JP03133737, EP0839729 A1, EP0568391 A2, EP0422781 A1,

Forward Citations: WO11150036, WO06052537, WO06044817, WO04087507, WO04087507, WO04076294, WO04071886, WO04071886, USD566548, US9598214, US9573744, US9540159, US9511916, US9499319, US9487320, US9481501, US9452874, US9446891, US9415915, US9394094, US9394093, US9392888, US9376250, US9352890, US9346574, US9346573, US9334093, US9284084, US9233769, US9205939, US9169050, US9126716, US9079699, US9073683, US9073663, US9022217, US9010620, US8978889, US8967380, US8955674, US8936149, US8919557, US8887952, US8881901, US8701878, US8646654, US8631932, US8602209, US8579154, US8550332, US8459538, US8459534, US8444046, US8439194, US8408392, US8387855, US8376214, US8356744, US8356743, US8302811, US8281979, US8220702, US8181782, US8167194, US8162206, US8127924, US8123072, US8118212, US7992765, US7946451, US7918385, US7918384, US7909163, US7874477, US7815097, US7780003, US7762451, US7757934, US7712653, US7699213, US7648061, US7648048, US7621438, US7614497, US7604157, US7568612, US7552857, US7523842, US7478745, US7467713, US7401711, US7374076, US7374043, US7367453, US7337942, US7331507, US7328834, US7207474, US7185762, US7175047, US7147143, US7134593, US7134551, US7100798, US7000803, US6997316, US6991107, US6974072, US6918487, US6902104, US6866188, US6860400, US6715639, US6604677, US2012261432, US2011139865, US2010252619, US2009321507, US2009237548, US2009230143, US2009065388, US2008245850, US2008145559, US2008116251, US2008110968, US2008099545, US2008066953, US2007295792, US2007269401, US2007228133, US2007228131, US2007114151, US2007095697, US2007062834, US2006157546, US2006144914, US2006108406, US2006091193, US2006091192, US2006081692, US2006081492, US2006054522, US2006016864, US2006000881, US2005274638, US2005263578, US2005224565, US2005218203, US2005211601, US2005205653, US2005189405, US2005178791, US2005145685, US2005109827, US2004188508, US2004182880, US2004164136, US2004164133, US2004159671, US2004155098, US2004154945, TWI341812, KR101580670, JP5222737, JP5078984, JP2009530192, JP2006521255, EP1615840, CN102892685, CN102892685, AU2007225217, AU2004210874,

Abstract:
Source: US2002185527A A carton includes a first wall, a second wall connected to the first wall along a corner fold line and disposed at an angle with respect to the first wall to define a corner of the carton along the corner fold line, and a tear line formed in the first wall and extending into the second wall to define a tear panel disposed astride the corner fold line. The tear panel includes a push tab connected thereto along a transverse fold line extending transversely of the corner fold line.

0) US5482158A – PROMOTIONAL DEVICE FOR DELIVERING A PRIZE FROM ...

106) Family number: 8663278 (US5482158A) © PatBase

Title: PROMOTIONAL DEVICE FOR DELIVERING A PRIZE FROM A BEVERAGE CAN

Priority: US19940347091 19941123 WO1995US15094 19951117

Family:

Publication number	Publication date	Application number	Application date
AT232821 E	20030315	AT19950941431T	19951117
AU199642854 A1	19960617	AU19960042854	19951117
AU685341 B2	19980115	AU19960042854	19951117
DE69529683 D1	20030327	DE19956029683	19951117
DE69529683 T2	20031023	DE19956029683T	19951117
EP0792242 A1	19970903	EP19950941431	19951117
EP0792242 B1	20030219	EP19950941431	19951117
JP10509678 T2	19980922	JP19960517026T	19951117
US5482158 A	19960109	US19940347091	19941123
WO9615955 A1	19960530	WO1995US15094	19951117
ZA9509982 A	19960530	ZA19950009982	19951123

Probable Assignee: COCA COLA CO

Assignee(s):(std)**:** COCA COLA CO

Assignee(s): THE COCA COLA CO ATLANTA ; THE COCA COLA COMPANY

Inventor(s):(std)**:** PIESTER GEORGE ; PLESTER GEORGE

Inventor(s): GEORGE PIESTER ; GEORGE PLESTER

Agent(s): PHILLIPS ORMONDE FITZPATRICK

Designated states: AT AU BE CH DE DK ES FR GB GR IE IT JP LI LU MC NL PT SE

International class (IPC 8–9): B65D25/10 B65D77/08 B65D77/24 B65D8/00 (Advanced/Invention); B65D25/10 B65D8/00 (Advanced/Non–invention); B65D25/10 B65D77/00 B65D77/24 B65D8/00 (Core/Invention)

International class (IPC 1–7): B65D B65D25/10 B65D77/08 B65D77/24 B65D8/00 B65D85/72

CPC: Y10S206/831 B65D77/24 B65D2517/0052

European class: B65D77/24 L65D517/00Y6B

US class: 206/217 206/232 206/459.5 206/831 426/112

Classification Explorer

Cited documents: WO8901750 A1, US5172827 A, US5071019 A, US5056681 A, US5056659 A, US5046631 A, US4930652 A, US4923084 A, US4923083 A, US4911320 A, US4892187 A, US4826034 A, US4728001 A, US4709829 A, US4690294 A, US4537324 A, US4356927 A, US4305521 A, US4228913 A, US4109817 A, US3656654 A, GB2237789 A1, GB2217677 A1, EP0482776 A1, EP0444385 A1, EP0079673 A2, EP0078789 A2, AU7572291 A1, AU7483491 A1, AU1657695 A1,

Forward Citations: WO9965792, WO9926845, WO9901359, WO9809877, WO04101377, WO04009468, WO0204305, US6315148, US6311860, US6244022, US6123189, US6056116, US5971195, US5957279, US5899351, US5848721, US5785171, US5728415, US2010184316, US2010045231, US2006150450, US2003094459, EP1384683, EP1114782, EP1087896, AU743336, AU721512, AU2004238398,

Abstract:
Source: US5482158A A container assembly for housing liquid products and a prize therein which may be distributed with non–prize bearing containers comprising: a can for containing the liquid product in an interior chamber thereof, and a prize–holding subassembly positioned within the interior chamber for retaining a prize therein. The prize holding subassembly includes an expandable base portion which expands outwardly against interior side walls of the can to firmly grip the same in response to placing a closure on an open end of the can.

The prize within the subassembly is moveable between a storage position within the can and a second position in juxtaposed, exposed relationship with the open end of the can in response to opening of the closure means.

0) US2015001220A – CAN COMPRISING A FIRST, DISPENSE OPENING AND SE...

107) Family number: 54270103 (US2015001220A) © PatBase

Title: CAN COMPRISING A FIRST, DISPENSE OPENING AND SECOND, VENT OPENING AND A SINGLE PULL TAB

Priority: EP20120150045 20120103 EP20120808410 20121221 WO2012EP76822 20121221

Family:

Publication number	Publication date	Application number	Application date
AR089521 AA	20140827	AR2012P105047	20121228
AU2012364346 AA	20130711	AU20120364346	20121221
AU2012364346 BB	20161117	AU20120364346	20121221
CA2862781 AA	20140630	CA20122862781	20121221
CN104136333 A	20141105	CN201280070680	20121221
CN104136333 B	20160817	CN201280070680	20121221
EP2612822 A1	20130710	EP20120150045	20120103
EP2800704 A1	20141112	EP20120808410	20121221
MX2014008151 A1	20141125	MX20140008151	20121221
RU2014127701 A	20160227	RU20140127701	20121221
RU2607176 C2	20170110	RU20140127701	20121221
UA113297 C2	20170110	UA20140007481	20121221
US2015001220 AA	20150101	US20120370756	20121221
WO13102595 A1	20130711	WO2012EP76822	20121221

Probable Assignee: ANHEUSER BUSCH INBEV SA

Assignee(s):(std)**:** ANHEUSER BUSCH INBEV S A ; ANHEUSER BUSCH INBEV SA

Assignee(s): ANHEUSER BUSCH INBEV SAGRAND PLACE 1B–1000BRUSSELSBE ; NEINER CHRISTOPHER

Inventor(s):(std)**:** CHRISTOPHER NEINER ; NEINER CHRISTOPHER

Inventor(s): NEINER CHRISTOPHERUS

Agent(s): ADAMS PLUCK; BORDEN LADNER GERVAIS LLP; BIIP CVBA

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/32 B65D51/16 (Advanced/Invention)

CPC: B65D2517/0014 B65D2517/0092 B65D51/1683 B65D17/165

US class: 220/269 220/271

Classification Explorer

Cited documents: WO10046516 A1, WO09078738 A1, WO08034801 A1, WO08023983 A1, WO04035399 A1, US7513383, US5819973 A, US5695085 A, US5494184 A, US5397014 A, US4213538 A, US4014455 A, US3868918 A, US3856184 A, US3796344 A, US3744666 A, US3618815 A, US3604589 A, US3326406 A, US3307737 A, US3272166 A, US2011056946 AA, US2010294771 AA, US2010018976 AA, US2008067175 AA, US2003111469 AA, US2003098306 AA, SU1491328, NL1023297 C1, JP5310248 A2, CN1668505 A, CN102202981 A, CA2280461 AA,

Forward Citations: USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, US9446879, US9233784,

Abstract:
Source: US2015001220A A can for containing a liquid having a top end is disclosed. The top end has a dispense area defined by a first score line and a pull tab coupled to the top end by a rivet. The pull tab has a puncturing end for breaking the first score line and pushing into the interior of the can without detaching the dispense area to open a dispense aperture. A vent area is defined by a second score line and positioned on the opposite side of the rivet. The first and second score lines are separated by at least one torsion stripe of the can top material for acting as a hinge by torsion upon lifting the actuating end of the pull tab. As the dispense aperture is opened by pushing the dispense area into the interior of the can, a vent aperture is opened by pulling the vent area outwards.

0) US4116360A – CAN END WITH PROTECTIVE FOLD

108) Family number: 1104641 (US4116360A) © PatBase

Title: Can end with protective fold

Priority: US19720229678 19720228

Family:

Publication number	Publication date	Application number	Application date
AR198817 A1	19740724	AR19730246788	19730226
AU197352425 A1	19740822	AU19730052425	19730221
AU474872 B2	19760805	AU19730052425	19730221
BR7301487 A0	19740905	BR19730001487	19730228
CA1007583 A1	19770329	CA19720150121	19720824
DE2308986 A1	19730906	DE19732308986	19730223
FR2173882 A1	19731012	FR19720030732	19720830
FR2173882 B1	19780721	FR19720030732	19720830
GB1422648 A	19760128	GB19730009359	19730226
JP1019518 C3	19801030	JP19730023681	19730227
JP48098989 A2	19731215	JP19730023681	19730227
JP55010456 B4	19800317	JP19730023681	19730227
US4116360 A	19780926	US19720229678	19720228

Probable Assignee: DORN CO V

Assignee(s):(std)**:** DORN CO ; DORN CO V ; DORN CY VAN ; CENTRAL STATES CAN CO ; CENTRAL STATES CAN CO DIVISION

Assignee(s): CENTRAL STATES CAN CO DIVISION OF VAN DORN COMPAN ; CENTRAL STATES CAN CO DIVISION OF VAN DORN COMPANY ; MCKERNAN BERNARD J ; VAN DORN CY US ; VAN DORN CO ; VAN DORN COMPANY ; VAN DORN CY ; STARGELL DONALD E

Inventor(s):(std)**:** MCKERNAN B ; MCKERNAN BERNARD J ; MCKERNAN BERNARD JOSEPH ; STARGELL D ; STARGELL DONALD E ; STARGELL DONALD EARLE

Inventor(s): BERNARD JOSEPH MCKERNAN ; BERNARD JOSEPH MCKERNAN AND DONALD EARLE STARGELL ; DONALD EARLE STARGELL ; EARLE STARGELL DONALD ; JOSEPH MCKERNAN BERNARD

International class (IPC 8–9)**:** B65D1/02 B65D17/00 B65D17/34 B65D17/347 B65D17/353 B65D17/40 B65D41/32 B65D41/42 (Advanced/Invention); B65D1/02 (Advanced/Non–invention); B65D1/02 B65D17/00 B65D17/28 B65D41/32 (Core/Invention)

International class (IPC 1–7)**:** B65D17/00 B65D17/02 B65D17/16 B65D17/24 B65D17/40 B65D41/32 B65D41/42

CPC: B65D17/163

European class: B65D17/16B1

US class: 220/273

Classification Explorer

Cited documents: US3696961 A, US3682350 A, US3490643 A, US3451586 A, US3450301 A, JP47008696 A2, FR2112318 A1,

Forward Citations: WO9630269, WO13020706, US9637269, US9272819, US8844761, US5145086, US4804106, US4565298, US4386713, US2006237459, GB2168313, GB2116934, EP2557050, DE2728511, DE2655019,

Abstract:
Source: US4116360A An aluminum food product container or can having an easily opened can end seamed to one end of the can body. The outer surface of the can end member has a score line along which the can end is severed for opening the can and removing an end panel. The score line is located adjacent and above a shoulder in the can body extending inwardly below the seam. A protective double fold is formed in the can end by

extending the end metal annularly inwardly in a first layer from the score line, then reversely outwardly in a second layer beneath the first layer to a location circumferentially underlapping the score line location, and then reversely inwardly in a third layer beneath the first two layers into the can end panel portion. The double fold formation presents a dull hazard–free edge to the end panel when torn from the can end member.

109) Family number: 57414587 (US2014263327A) © PatBase

Title: CONTAINER END CLOSURE WITH BUCKLE CONTROL FEATURE

Priority: US20130073492 20131106 US20130798301P 20130315 WO2014US18866 20140227

Family:

Publication number	Publication date	Application number	Application date
CA2904576 AA	20150908	CA20142904576	20140227
CN105164020 A	20151216	CN201480024857	20140227
EP2969800 A1	20160120	EP20140768837	20140227
EP2969800 A4	20170405	EP20140768837	20140227
MX2015012990 A1	20160510	MX20150012990	20140227
RU2015144178 A	20170427	RU20150144178	20140227
US2014263327 AA	20140918	US20130073492	20131106
US9114451 BB	20150825	US20130073492	20131106
WO14149485 A1	20140925	WO2014US18866	20140227

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP

Assignee(s): CHASTEEN HOWARD C ; JACOBER MARK A

Inventor(s):(std)**:** CHASTEEN HOWARD C ; JACOBER MARK A

Inventor(s): MARK A JACOBER ; HOWARD C CHASTEEN

Agent(s): SMART AND BIGGAR; EISENFUEHR SPEISER; SHERIDAN ROSS PC; PEARSON KENDRIA E

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/44 B65D17/00 B65D17/34 B65D6/30 (Advanced/Invention)

CPC: B21D51/44 B65D17/165 B65D2517/0014 B65D2517/0068 B65D2517/0074 B65D2517/0089 Y10T29/49863

US class: 1/1 220/269 29/446

Classification Explorer

Cited documents: WO12143322 A1, WO03039785 A1, US8851323 BB, US8496132 BB, US8328492 BB, US8157119 BB, US7926675 BB, US7591392 BB, US7370774 BB, US7107928 BB, US6908005 BA, US6089072 A, US6077554 A, US5829623 A, US5598734 A, US5590807 A, US4928844 A, US4796772 A, US4577774 A, US4535909 A, US4503989 A, US4394927 A, US4132328 A, US2013306658 AA, US2011297679 AA, JP63303639 A2, JP6179443 A2, JP5112357 A2, JP4666327 A2, JP2002239662 A2, JP2002145263 A2, JP2000159229 A2, EP0663346 A1,

Forward Citations: USD762114, USD750488, US9446879, US9233784, US2016031613, US2013118133,

Abstract:
Source: US2014263327A An end closure for food and beverage containers is provided. The end closure comprises a central panel portion having an induced buckle coin and an interrupted panel coin positioned proximate to an inner panel wall to control the buckling location on the end closure. Thus, the end closure will buckle at a predetermined location away from the score and tear panel to avoid catastrophic failure and container leakage.

0) US6126034A – LIGHTWEIGHT METAL BEVERAGE CONTAINER

110) Family number: 12572814 (US6126034A) © PatBase

Title: Lightweight metal beverage container

Priority: US19980074826P 19980217 US19990251504 19990217

Family:

Publication number	Publication date	Application number	Application date
US6126034 A	20001003	US19990251504	19990217

Probable Assignee: ALCAN ALUMINUM CORP

Assignee(s):(std)**:** ALCAN ALUMINUM CORP

Assignee(s): BANK OF AMERICA NA ; BANK OF AMERICA NATIONAL ASSOCIATION ; CITICORP NORTH AMERICA INC ; LASALLE BUSINESS CREDIT LLC ; NOVELIS CORP ; UBS AG ; NOVELIS INC ; UBS STAMFORD BRANCH AG

Inventor(s):(std)**:** BORDEN CRAIG L ; BROWN MCKAY C ; GILLEST EDMUND T ; LIEB DAVID P

International class (IPC 8–9)**:** B65D1/42 B65D8/12 (Advanced/Invention); B65D1/40 B65D8/04 (Core/Invention)

International class (IPC 1–7)**:** B65D8/12

CPC: B65D1/42 B65D7/12 B65D7/36

European class: B65D1/42 B65D7/12 B65D7/36

US class: 206/509 220/670 220/671

Classification Explorer

Cited documents: US941720 A, US5595322 A, US5339975 A, US5279442 A, US5261558 A, US4723681 A, US4685582 A, US4111328 A, US3265310 A, US3168777 A, US2152245 A,

Forward Citations: WO09097678, WO03059764, USD787952, USD698668, US9663846, US9566634, US9517498, US9371152, US8931660, US8727169, US8505765, US8341995, US8313004, US8235244, US8205477, US7938290, US7748563, US7743635, US7673768, US7506779, US7500376, US7380684, US7341163, US7100789, US6761280, US6748789, US6736283, US6702142, US6561004, US6499622, US2015355064, US2012292329, US2009193869, US2005006395, US2004211786, US2004140312, US2004074911, AU2003207518,

Abstract:
Source: US6126034A Lightweight beverage containers disclosed herein require less metal per container, exhibit less earing and have one or more of the following features: 1) a reduced seam between the can end and the can body, 2) a side wall having vertically disposed alternating portions of relatively thicker and relatively thinner metal, 3) a can end dimensioned to fit within the domed bottom of a vertically adjacent similar can when stacked, 4) a can body produced from an acircular blank dimensioned to produce said can body without ears, and 5) a can body produced from a cup having a variable radius between the side of said cup and the bottom thereof.

0) US2013246136A – DEVICE, SYSTEM AND METHOD FOR FACILITATING INTE...

111) Family number: 52839383 (US2013246136A) © PatBase

Title: DEVICE, SYSTEM AND METHOD FOR FACILITATING INTERACTION BETWEEN A WIRELESS COMMUNCATION DEVICE AND A PACKAGE

Priority: GB20120020373 20121112 US20120611222P 20120315 US20120612064P 20120316 US20130827003 20130314 WO2013US31359 20130314 US20160065207 20160309

Family:

Publication number	Publication date	Application number	Application date
CA2867453 AA	20140915	CA20132867453	20130314
CN104756146 A	20150701	CN201380025274	20130314
EP2826007 A2	20150121	EP20130713012	20130314
GB201220373 A0	20121226	GB20120020373	20121112
GB2507810 A1	20140514	GB20120020373	20121112
HK1206469 A1	20160108	HK20150106891	20150720
JP2015522856 T2	20150806	JP20150500612T	20130314
RU2014141503 A	20160510	RU20140141503	20130314
US2013246136 AA	20130919	US20130827003	20130314
US2016292697 AA	20161006	US20160065207	20160309
WO13138595 A2	20130919	WO2013US31359	20130314
WO13138595 A3	20140410	WO2013US31359	20130314
WO14072455 A2	20140515	WO2013EP73348	20131108
WO14072455 A3	20140731	WO2013EP73348	20131108

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING UK PLC ; CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC

Assignee(s): CROWN PACKAGING TECHNOLOGY INC11535 SOUTH CENTRAL AVENUEALSIPIL60803–2599US ; DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; MCGRILL LAURA JANE ; RAMSEY CHRISTOPHER PAUL ; MCGIRR LAURA JANE ; VAUGHAN LAURA JANE

Inventor(s):(std)**:** MCGIRR LAURA JANE ; MCGRILL LAURA JANE ; RAMSEY CHRISTOPHER PAUL ; VAUGHAN LAURA JANE ; VAUGHN LAURA JANE

Inventor(s): RAMSEY CHRISTOPHER PAULGB ; MCGRILL LAURA JANEGB ; MCGIRR LAURA JANEGB ; CHRISTOPHER PAUL RAMSEY ; LAURA JANE MCGIRR

Agent(s): GOWLING LAFLEUR HENDERSON LLP; LIND ROBERT; INO SARI; KURASAWA ICHIRO; MATSUSHITA MITSURU; DESHIMARU TAKESHI; KUMAKURA YOSHIO; FULLMER HAROLD H ET AL; RATLIFF ISMAY ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A63F13/00 A63F13/213 A63F13/216 B42D15/00 B65D1/12 B65D1/22 B65D17/00 B65D25/20 B65D41/12 B65D41/32 B65D85/00 G06F3/048 G06K19/06 G06K7/10 G06K7/14 G06Q10/08 G06Q20/32 G06Q30/00 G06Q30/02 G06Q30/06 H04W4/02 (Advanced/Invention); G06Q (Subclass/Invention)

CPC: B65D85/00 G06Q20/3276 G06Q30/02 B65D41/32 B42D15/00 B65D1/12 B65D1/22 B65D17/16 B65D17/24 B65D17/163 B65D17/165 B65D41/12 B65D2203/00 B65D2517/0052 B65D2517/0053 Y10T29/49 G09F3/0297 G06Q30/018 G06Q10/0835 H04W4/021 G06K19/06037 G06K7/10861 G06Q30/0643

US class: 206/459.1 235/375 29/592 463/29 705/14.12 705/26.7 705/27.1 705/306 705/317

Classification Explorer

Cited documents: WO13138595 A2, WO13049313 A2, WO12177077 A2, WO11107895 A1, WO05026017 A1, US8708221 BA, US6677967 BB, US6250554 BA, US6155409 A, US5939699 A, US2012219179 AA, US2012196661 AA, US2012172127 AA, US2012152781 AA, US2012085829 AA, US2011313918 AA, US2010315439 AA, US2010102117 AA, US2009319181 AA, US2009234731 AA, US2009089705 AA, US2007218980 AA, US2006181510 AA, US2005039092 AA, US2004104141 AA, US2002161640 AA, US2002056756 AA, JP3100125 U1, JP2011118600 A2, JP2011016546 A2, JP2011011454 A2, JP2010167571 A2, JP2009116525 A2, JP2006168735 A2, JP2005182416 A2, JP2005070725 A2, JP2004287037 A2, JP2004213629 A2, JP2003150745 A2, JP2002511696 T2, JP2002279268 A2, JP2002037420 A2, JP11248552 A2, GB2390592 A1, GB2354360 A1, EP1560009 A1,

DE102009027862 A1

CN101951592 A, CN101950200 A, CN101908155 A,

Forward Citations: WO15162729, WO14072455, WO14072455, US9665887, US9340368, US9259913, US2014019238, CN105691824, CN105600117, CN105501616,

Abstract:
Source: US2013246136A A method of providing a personalized experience on a wireless communication device corresponding to the contents of a package, the package containing a product may include the steps of reading a unique code on a package, the package containing a product, displaying a personalized illusory images on the wireless communication device, and altering the personalized illusory images in response to relative movement between the package and the camera.

0) US2006280846A – FOOD CONTAINER

112) Family number: 33994524 (US2006280846A) © PatBase

Title: FOOD CONTAINER

Priority: US20050136400 20050525

Family:

Publication number	Publication date	Application number	Application date
US2006280846 AA	20061214	US20050136400	20050525
US7563495 BB	20090721	US20050136400	20050525

Probable Assignee: KRAFT FOODS GROUP BRANDS LLC

Assignee(s):(std)**:** KRAFT FOODS GLOBAL BRANDS LLC ; KRAFT FOODS HOLDINGS INC

Assignee(s): KRAFT FOODS GROUP BRANDS LLC

Inventor(s):(std)**:** ANELLI MATTHEW

Agent(s): FITCH EVEN TABIN AND FLANNERY

International class(IPC 8–9)**:** B31B45/00 B32B1/08 B65D75/38 B65D85/00 (Advanced/Invention); B31B45/00 B32B1/00 B65D75/38 B65D85/00 (Core/Invention)

CPC: Y10T428/13 Y10T428/1317 B65D17/163 B65D25/16

European class: B65D17/16B1 B65D25/16

US class: 426/122 428/34.1 428/34.6

Classification Explorer

Cited documents: US6076693 A, US5236102 A, US5069356 A, US5052573 A, US4982867 A, US4555339 A, US4538758 A, US4535909 A, US4459793 A, US4406378 A, US4321922 A, US4311255 A, US4142453 A, US3627166 A, US3347411 A, US3318495 A, US3285461 A, US3159303 A, US3144167 A, US2760430 A, US2331901 A, US2094600 A, US2005115975 AA, US2004105917 AA, US2003197016 AA, US2003121233 AA, US2003024930 AA, US1680882 A, US1335383 A, EP0122336 A1,

Forward Citations: USD669777, US9604769, US9463894, US9145251, US8151992, US2014117025, US2013292394, US2013062400, US2010206763, ITBO20130154,

Abstract:
Source: US2006280846A A food container is provided which releases food contents thereof more easily and effectively. The food container includes an insert inserted into a metallic can before food product is filled therein and attachment of a closure end, where the insert provides an effective aid to product release by reducing or eliminating vacuum effects caused by hot–filling and cooling of the food product and/or wall adhesion effects between the food product and food container.

113) Family number: 2245439 (US4688395A) © PatBase

Title: Self–contained cooling device for food containers

Priority: US19850783664 19851003 US19850881386 19860701 US19860881386 19860701 WO1986US02073 19861002

Family:

Publication number	Publication date	Application number	Application date
AU198664095 A1	19870424	AU19860064095	19861002
AU582527 B2	19890323	AU19860064095	19861002
AU6409586 A1	19870424	AU19860064095D	19861002
BRPI8606900 A	19871103	BR1986PI06900	19861002
DK281887 A	19870602	DK19870002818	19870602
DK281887 A0	19870602	DK19870002818	19870602
EP0239627 A1	19871007	EP19860906199	19861002
EP0239627 A4	19871123	EP19860906199	19861002
FI872405 A	19870529	FI19870002405	19870529
FI872405 A0	19870529	FI19870002405	19870529
JP6100407 B4	19941212	JP19860505285	19861002
JP63501656 T2	19880623	JP19860505285T	19861002
JP63501656 T2	19880623	JP19860505285	19861002
NO872172 A	19870525	NO19870002172	19870525
NO872172 A0	19870525	NO19870002172	19870525
US4688395 A	19870825	US19860881386	19860701
WO8702123 A1	19870409	WO1986US02073	19861002

Probable Assignee: SUPERIOR MARKETING RESEARCH CORP A CORP OF UTAH

Assignee(s):(std)**:** SUPERIOR MARKETING RES CO ; SUPERIOR MARKETING RES CORP ; SUPERIOR MARKETING RESEARCH CO

Assignee(s): SUPERIOR MARKETING RESEARCH CORP ; SUPERIOR MARKETING RESEARCH CORP A CORP OF UTAH

Inventor(s):(std)**:** HOLCOMB ROBERT R

Inventor(s): ROBERT R HOLCOMB

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD

Designated states: AT AU BE BR CH DE DK FI FR GB IT JP KR LI LU NL NO SE

International class (IPC 8–9): F25D3/10 F25D7/00 (Advanced/Invention); F25D7/00 (Core/Invention); A47G F25D (Subclass/Invention)

International class (IPC 1–7): A47G F25D3/10 F25D7/00

CPC: F25D3/107 F25D2331/805 F25D2331/808

European class: F25D3/10C R25D331/805 R25D331/808

US class: 62/294 62/457.2 62/457.9

Classification Explorer

Cited documents: US4319464 A, US3987643 A, US3919856 A, US3862548 A, US3852975 A, US3842617 A, US3759060 A, US3726106 A, US3696633 A, US3636726 A, US3597937 A, US3525236 A, US3494143 A, US3494141 A, US3379025 A, US3320767 A, US3309890 A, US3269141 A, US2746265 A, US2460765 A, US2082381 A, FR2223986 A6, EP0118735 A2, AU28599, AU28599,

Forward Citations: WO9627110, WO9315960, WO9315960, WO14039388, WO07074329, WO03042610, USD781356, US9039924, US8016150, US7390341, US7240507, US6854280,

US6722153, US6530235, US6102108, US5692391, US5655384, US5609038, US5555741, US5394703, US5325680, US5214933, US5201183, US4941328, US2015204602, US2010251731, US2009266737, US2007175233, US2005039485, US2004261380, GB2333586, GB2313436, GB2290131, FR2832495, FR2810021, FR2692661, EP1164341, EP0632877,

Abstract:
Source: US4688395A A self−contained cooling device for use in a container such as a food container to cool the contents of the container at any desired time includes a reservoir containing pressurized fluid. The reservoir is secured to the inside of the container to form an expansion chamber between the reservoir and the container. A tube communicates with the reservoir and extends into the expansion chamber, the tube normally being closed to prevent escape of pressurized fluid from the reservoir. When it is desired to cool the contents of the container the tube is opened so that pressurized fluid from the reservoir expands into the expansion chamber thereby cooling the expansion chamber, reservoir, and contents of the container. Embodiments of the device shown specifically are adapted to be used with commonly used "pop−top" beverage cans and in such instance the tube extends to securement with the tab used to operate the "pop−top" or with a separate tab, and operation of the tab causes opening of the tube in the expansion chamber. The device may be secured to the end of the normal "pop−top" can and the reservoir is generally conical in configuration, so can easily be inserted into the filled beverage can by high speed canning equipment as the end is placed on the can and sealed. A further embodiment of the device is shown specifically adapted for use and reuse in an insulated food container.

0) US5085339A – RECLOSABLE CONTAINER CLOSURE

114) Family number: 3526864 (US5085339A) © PatBase

Title: Reclosable container closure

Priority: US19900591275 19901001 WO1991US06955 19910927

Family:

Publication number	Publication date	Application number	Application date
AT152412 E	19970515	AT19910917453T	19910927
AU199186283 A1	19920428	AU19910086283	19910927
AU665500 B2	19960104	AU19910086283	19910927
CA2093224 AA	19930401	CA19912093224	19910927
CA2093224 C	20030506	CA19912093224	19910927
DE69125943 D1	19970605	DE19916025943	19910927
DE69125943 T2	19971009	DE19916025943T	19910927
EP0550597 A1	19930714	EP19910917453	19910927
EP0550597 B1	19970502	EP19910917453	19910927
JP3221680 B2	20011022	JP19910516086	19910927
JP6501905 T2	19940303	JP19910516086T	19910927
US5085339 A	19920204	US19900591275	19901001
WO9206011 A1	19920416	WO1991US06955	19910927

Probable Assignee: SILGAN CONTAINERS CORP

Assignee(s):(std)**:** POLYSTAR PACKAGING INC

Assignee(s): POLYSTAR PACKAGING INC NORWALK CONN US ; ROTH DONALD J ; SILGAN CONTAINERS CORP ; SAUER DONALD G ; DEUTSCHE BANK TRUST CO ; HEYN WILLIAM M

Inventor(s):(std)**:** HEYN WILLIAM ; HEYN WILLIAM M ; SAUER DONALD ; SAUER DONALD G ; ROTH DONALD ; ROTH DONALD J

Inventor(s): ROTH DONALD J WESTPORT CT 06880 US ; SAUER DONALD G HARWINTON CT 06790 US ; WILLIAM M HEYN ; HEYN WILLIAM M NEW CANAAN CT 06840 US ; DONALD G SAUER ; DONALD J ROTH

Agent(s): LORD AND CO; RICHES MCKENZIE AND HERBERT LLP

Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CI CM DE DK ES FI FR GA GB GN GR HU IT JP KP KR LI LK LU MC MG ML MR MW NL NO PL RO SD SE SN SU TD TG

International class (IPC 8–9)**:** B65D17/00 B65D17/32 B65D17/40 B65D43/16 B65D47/36 (Advanced/Invention); B65D17/00 B65D17/28 B65D43/16 B65D47/00 (Core/Invention)

International class (IPC 1–7)**:** B65D17/00 B65D17/32 B65D17/40 B65D43/16 B65D47/36

CPC: B65D17/163

European class: B65D17/16B1

US class: 220/259 220/269 220/270 220/276 220/307 220/359 220/787

Classification Explorer

Cited documents: US4856708 A, US4724979 A, US4724978 A, US4609123 A, US4496069 A, US4171062 A, US4165016 A, US3628689 A, US3494500 A, US3245576 A, US2767754 A, US1930324 A,

Forward Citations: WO9935045, WO07099066, WO04060756, USD473140, US9493277, US7837052, US7597213, US7152753, US6889866, US6772904, US6761283, US6360909, US6196408, US6193094, US5931332, US5865335, US5758793, US5692635, US5667092, US5573130, US5547109, US5511679, US5507406, US5474199, US5145088, US5145085, US2011017740, US2010072217, US2009053372, US2009032535, US2009032534, US2006131319, US2005133508, TWI327546, FR2710033, EP0644126, CN104053603, CN104053603,

Abstract:
Source: US5085339A A reclosable closure for containers of the type used for keeping or storing product for some time following initial opening of the container. Typical uses would be for snack foods such as candies, peanuts, etc., and powdered products such as sugar, coffee, tea and other beverage mixes and the like. The closure also is adaptable for use with canned vagetables and meats and also with non−food products such as, for example, nails, tacks and a myriad of similar hardware items. The preferred closure includes an end panel and a ring−shaped frame member which are fused or otherwise adhered together during insert−injection molding of the frame member. Means are provided on the frame member for contacting an edge of the end panel, or an integral pull tab thereon, for restraining the end panel in a position for reclosing the container.

0) US3889844A – CAN CLOSURE

115) Family number: 1147431 (US3889844A) © PatBase

Title: Can closure

Priority: US19730393001 19730830 US19750540980 19750114

Family:

Publication number	Publication date	Application number	Application date
AU197472776 A1	19760311	AU19740072776	19740829
AU472220 B2	19760520	AU19740072776	19740829
BR7407245 A0	19750909	BR19740007245	19740830
DE2441490 A1	19750320	DE19742441490	19740829
DK444174 A	19750428	DK19740004441	19740820
FR2242302 A1	19750328	FR19740029489	19740829
FR2242302 B3	19770617	FR19740029489	19740829
GB1477862 A	19770629	GB19740037901	19740829
JP50050184 A2	19750506	JP19740099438	19740829
NL7411089 A	19750304	NL19740011089	19740820
US3889844 A	19750617	US19730393001	19730830
US3964415 A	19760622	US19750540980	19750114

Probable Assignee: MINNESOTA MINING AND MFG

Assignee(s):(std): MINNESOTA MINING AND MFG

Assignee(s): MINNESOTA MINING AND MFG CO ; MINNESOTA MINING MANUFACTURING ; MINNESOTA MINING MANUFACTURING US ; MINNESOTA MINING MFG CO ; MINNESOTA MINING AND MANUFACTURING CO ; MINNESOTA MINING AND MANUFACTURING CO SAINT PAUL MINN V ST A ; MINNESOTA MINING AND MANUFACTURING COMPANY ; MINNESOTA MINING AND MANUFACTURING COMPANY TE SAINT PAUL MINNESOTA VER ST V AM

Inventor(s):(std): KROPP W ; KROPP W E ; KROPP WILLIAM E ; KROPP WILLIAM EDUARD ; KROPP WILLIAM EDWARD ; VIKER H ; VIKER H W ; VIKER HARRIS W ; VIKER HARRIS WARREN

Inventor(s): WILLIAM EDWARD KROPP ; HARRIS WARREN VIKER

International class (IPC 8–9): B21D51/38 B65D17/50 (Advanced/Invention); B21D51/38 B65D17/00 (Core/Invention)

International class (IPC 1–7): B21D22/02 B21D51/44 B65D1/12 B65D17/02 B65D17/06 B65D17/16 B65D17/22 B65D17/24 B65D41/00 B65D47/06 B65D53/08 B65D7/04 B65D85/72

CPC: B21D51/383 B65D17/505 B65D17/506 B65D2517/0013 B65D2517/007 B65D2517/0094 B65D2517/5083

European class: B21D51/38B B65D17/50A3 B65D17/50B L65D517/00Y2B L65D517/00Y7B1 L65D517/00Y8B L65D517/50Q5

US class: 220/359 220/359.1 222/541.1 222/541.9 229/123.1 413/22 413/25

Classification Explorer

Cited documents: US564492 A, US3547305 A, US3441167 A, US3397811 A, US3331422 A, US3292828 A, US3281024 A, US3251515 A, US3217951 A, JP47031990 A2, JP46029508 U1,

Forward Citations: WO0200512, US6403003, US5514442, US5433992, US5067614, US5012946, US5004111, US4934544, US4684043, US4372460, US4332846, US4165004, US3990615, US2008302752, US2003062370, JP2008522828, GB2157644, EP0966388,

Abstract:
Source: US3889844A Cans sealed with removable pressure–sensitive adhesive tape tabs over a pour hole successfully contain carbonated beverages or other pressure–generating liquids if the area around the pour hole and under the tape is slightly elevated, thereby putting the tape in shear rather in peel. Circular can ends may be provided with a circular pour hole, taped and then shaped to impart a frusto–conical area around the pour hole before being crimped over the tubular can body.

0) GB1331489A – EASY OPEN CAN ENDS

116) Family number: 442633 (GB1331489A) © PatBase

Title: EASY OPEN CAN ENDS

Priority: FR19690037270 19691030

Family:

Publication number	Publication date	Application number	Application date
CA951654 A1	19740723	CA19700093223	19700915
DE2049824 A1	19710527	DE19702049824	19701010
FR2063746 A5	19710709	FR19690037270	19691030
GB1331489 A	19730926	GB19700049947	19701021
JP48025109 B4	19730726	JP19700087799	19701006
SE361447 B	19731105	SE19700013566	19701007

Probable Assignee: CARNAUD FORGE BASSEINDRE

Assignee(s):(std)**:** J J CARNAUD FORGES DE BASSEIND ; CARNAUD J J AND FORGES DE BA ETS ; CARNAUD FORGE BASSEINDRE ; CARNAUD AND FORGES ; CARNAUD ETS J J AND FORGES DE BA

Assignee(s): CARNAUD ETS J J AND FORGES DE BASSE INDRE ; BILLY EMILE ; ETABS J J CARNAUD FORGES DE BASSEINDRE ; CARNAUD J J AND FORGES DE BASSE INDRE ETS ; ETABLISSEMENTS J J CARNAUD AND FORGES DE BASSE INDRE SA FR ; ETHEVENAUX JEAN ; J J CARNAUD AND FORGES DE BASSE INDRE ETS

Inventor(s):(std)**:** ETHEVENAUX JEAN ; ETHEVENAUX J ; BILLY EMILE ; BILLY E

Inventor(s): ETHEVENAUX J FR ; BILLY E FR

International class (IPC 8–9)**:** B65D17/00 B65D17/34 B65D17/347 B65D17/35 B65D17/353 (Advanced/Invention); B65D17/00 B65D17/28 (Core/Invention)

International class (IPC 1–7)**:** B65D17/00 B65D17/16 B65D17/24

CPC: B65D17/163

European class: B65D17/16B1

Classification Explorer

Abstract:
Source: GB1331489A 1331489 Easy–opening cans ETABS J J CARNAUD and FORGES DE BASSE–INDRE 21 Oct 1970 [39 Oct 1969] 49947/70 Heading B8D The nose end 14 of a one piece pull tab 13, which is riveted to a removable, scorelinedefined panel 21 of a can end 11, overlies the scoreline 16 with a clearance gap "H" therebetween to avoid inadvertent rupture of the scoreline during handling or stacking of the cans. The integral bottom 26 of an upper can seats on the pull tab of a lower can. The clearance gap is formed by partly cutting away dependent side flanges 22 of convergent nosedefining tab portions 19 at 25, Fig. 3 (not shown), and is of the order of 1 mm. (i.e. 3–3¢ times the thickness of panel 21).

0) US3891117A – EASY–OPENING CAN END CONSTRUCTION

117) Family number: 1148528 (US3891117A) © PatBase

Title: Easy–opening can end construction

Priority: US19740473009 19740524

Family:

Publication number	Publication date	Application number	Application date
US3891117 A	19750624	US19740473009	19740524

Probable Assignee: DORN CO V

Assignee(s):(std)**:** DORN CO ; DORN CO V

Assignee(s): VAN DORN COMPANY

Inventor(s):(std)**:** DRAGOMIER JOHN D ; ZYSSET EDGAR H

International class(IPC 1–7)**:** B65D17/20 B65D17/24

CPC: B65D17/163 B65D2517/0079

European class: B65D17/16B1 L65D517/00Y7C3

US class: 220/270 220/712 D9/438

Classification Explorer

Cited documents: US3838788 A, US3762598 A, US3762596 A, US3744666 A, US3662916 A, US3604589 A,

Forward Citations: WO14009195, WO13188556, WO0121493, US8727169, US8646643, US6685417, US6401956, US5129541, US5105977, US4915246, US4344644, US4044915, US3941277, US2002158071, EP2684808, EP0318716, EP0236736,

Abstract:
Source: US3891117A An aluminum food product can having an easily–opened can end member seamed to one end of the can body. The can is opened by tearing a removable panel portion from the can end member along an endless main score line located adjacent and above an inwardly–projecting shoulder formed in the can body below the seam. The removable panel is torn using a finger pull tab riveted to the panel, and the removable panel has a protective triple metal thickness fold formation at its periphery. Angular outwardly–converging reinforcing beads are formed in the panel beneath the pull tab and on either side of the rivet to stiffen the removable panel in the area of the tab and rivet so as to reduce deformation of and strain on the base of the rivet to a minimum and to lessen the possibility of rivet fracture. The can bends at several areas during removal of the panel portion at locations approximately perpendicular to the pull tab center line radially outward of and also a considerable distance radially inward of the rivet. These bend areas also are generally aligned respectively with the outer and inner ends of the reinforcing beads. During lifting of the pull tab, the removable panel initially bends inward to form a small "smile" just below the nose of the pull tab. Subsequently, it bends in a bend area at the inner ends of the beads to increase the size of the "smile;" and then the panel tears more or less equally along the main score line until completely removed. Thus, the load on the rivet is equally distributed. The compactness of the protective triple fold formation on the removable panel is relieved in a zone beneath and adjacent the tip of the pull tab nose. The combined cooperative relation between the reinforcing beads, their position and location, the location of the bend areas, and the relief of the triple fold beneath the pull tab nose, provides decidedly improved end member opening characteristics.

0) US5816428A – EASY–OPEN CAN END AND SPOUT

118) Family number: 20568259 (US5816428A) © PatBase

Title: Easy–open can end and spout

Priority: US19940313872 19940928 US19960661155 19960610 WO1997US09843 19970610

Family:

Publication number	Publication date	Application number	Application date
AR007544 AA	19991110	AR1997P102522	19970610
AU199733796 A1	19980107	AU19970033796	19970610
US5816428 A	19981006	US19960661155	19960610
WO9747525 A1	19971218	WO1997US09843	19970610
ZA9705123 A	19971231	ZA19970005123	19970610

Probable Assignee: COCA COLA CO

Assignee(s):(std)**:** COCA COLA CO ; THE COCA COLA COMPANY

Inventor(s):(std)**:** GEORGE PLESTER ; PLESTER GEORGE

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CN CU CZ DE DK EE ES FI FR GB GE GH GR HU IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG UZ VN

International class (IPC 8–9): B65D1/20 B65D17/28 B65D25/44 B65D47/06 B65D8/02 (Advanced/Invention); B65D17/28 (Advanced/Non–invention)

International class (IPC 1–7): B65D17/00 B65D17/28 B65D25/44 B65D47/06 B65D77/28

CPC: B65D17/165 B65D25/44 B65D47/063 B65D2517/0016 B65D2517/0049 B65D2517/0062

European class: B65D17/16B2 B65D25/44 B65D47/06A1 L65D517/00Y2D L65D517/00Y6A L65D517/00Y7A1A

US class: 220/257 220/257.2 220/270 220/281 220/717 222/527

Classification Explorer

Cited documents: WO9603331 A1, WO8601488 A1, US4632288 A, US4632282 A, US4548332 A, US4513870 A, US4442949 A, US4403709 A, US3135441 A, US3093273 A, US3075676 A, US2895654 A, US2804242 A, US2594467 A, US2258145 A, GB1202922 A, FR1228265 A, EP0744355 A1, EP0409759 A1,

Forward Citations: WO9943243, WO16007101, WO15089206, WO11148012, WO09149530, WO09149530, WO09106124, WO09051557, WO06119599, WO04078597, WO0105672, USD747649, USD747199, USD452443, US9637269, US9334082, US9272819, US8985371, US8857644, US8844761, US7152766, US6454094, US5979697, US2010320207, US2010224628, US2010126992, US2008156820, US2007278255, US2006261069, US2004129713, ITBO20100739, FR2816920, FR2806390, EP1862395, EP1686066, EP1136387, EP0945361, DE102005004759, CN103625762,

Abstract:
Source: US5816428A To provide a can–lid with pop–out–spout, a folded, plastic spout is secured on the underside of a metal can–lid, which is conventionally roll–seamed onto the can–body. This is achieved either by gluing, or by plastic–coating the underside of the lid and heat–sealing the spout to the lid, or by incorporating the tips of the spout's flange in the roll–seamed joint of the can–lid, or other appropriate means. When the can is opened, the spout is released and either unfolds automatically due to the beverage's pressure (in case of carbonated beverages), or can be pulled out by the user. The spout is provided wither with a screw–closure, or with a twist–off, flick–open closure. In one version, the spout is completely covered by the can–lid, which is provided by an opening feature which enables an opening large enough for the spout to pass out. In a further version, the can–lid has a pre–cut aperture, behind which the closure on the spout is locked until the user opens by twisting the closure to free it from aperture. Pilfer–evidence is provided by the can–lid itself, where this has no pre–cut aperture, or by making the handles of the closure pilfer–evident when bent out, or by applying a label across the pre–cut aperture.

0) US2002153123A – CONTINUOUS CASTING OF ALUMINUM

119) Family number: 28305951 (US2002153123A) © PatBase

Title: Continuous casting of aluminum

Priority: EP20030737080 20030613 US20010270262P 20010220 US20020078638 20020219 US20020078638P 20020219 US20020405333P 20020821 US20020405359P 20020821 US20020406453P 20020828 US20020406504P 20020828 US20020406505P 20020828 US20060549408 20061013 US20030461704 20030613 WO2002US05019 20020220 US20020406506P 20020828 US20020406507P 20020828 WO2003US18764 20030613 WO2002US05019 20030820

Family:

Publication number	Publication date	Application number	Application date
AT431208 E	20090515	AT20020706344T	20020220
AU2002240436 AA	20020904	AU20020240436	20020220
AU2003236522 AA	20040311	AU20030236522	20030613
DE60232337 D1	20090625	DE20026032337	20020220
DE60343943 D1	20130627	DE20036043943	20030613
EP1414602 A2	20040506	EP20020706344	20020220
EP1414602 B1	20090513	EP20020706344	20020220
EP1545812 A1	20050629	EP20030737080	20030613
EP1545812 A4	20060405	EP20030737080	20030613
EP1545812 B1	20130501	EP20030737080	20030613
ES2323767 T3	20090724	ES20020706344T	20020220
ES2423825 T3	20130924	ES20030737080T	20030613
JP2005504635 T2	20050217	JP20020565730T	20020220
JP2005536354 T2	20051202	JP20040530797T	20030613
JP4375966 B2	20091202	JP20020565730T	20020220
KR100861563 B1	20081002	KR20037010929	20020220
KR101129489 B1	20120328	KR20057002906	20030613
KR20040004533 A	20040113	KR20037010929	20030820
KR20050058402 A	20050616	KR20057002906	20030613
KR20110026026 A	20110314	KR20117004617	20110225
PT1414602 T	20090805	PT20020706344T	20020220
US2002153123 AA	20021024	US20020078638	20020219
US2003205357 AA	20031106	US20030461704	20030613
US2007137830 AA	20070621	US20060549408	20061013
US6672368 BB	20040106	US20020078638	20020219
US7125612 BB	20061024	US20030461704	20030613
US7503378 BB	20090317	US20060549408	20061013
WO02066181 A2	20020829	WO2002US05019	20020220
WO02066181 A3	20040219	WO2002US05019	20020220
WO04018124 A1	20040304	WO2003US18764	20030613

Probable Assignee: ALCOA INC

Assignee(s):(std)**:** ALCOA INC ; REYNOLDS FOIL INC ; UNAL ALI

Assignee(s): ALCOA INC PITTSBURGH ; ARCONIC INC

Inventor(s):(std)**:** UENAL ALI ; UNAL ALI ; ALI UNAL

Inventor(s): UENAL ALI ALCOA INC ALCOA TECHNICAL CENTER ; UENAL ALIALCOA INCALCOA TECHNICAL CENTER ALCOA CENTER

Agent(s): BOEHMERT AND BOEHMERT ANWALTSPARTNERSCHAFT MBB PATENTANWAELTE RECHTSANWAELTE; EBNER VON ESCHENBACH JENNIFER ET AL; BARTON

MATTHEW THOMAS; ARIAS JUAN; MARUYAMA TOSHIYUKI; INTELLECTUAL PROPERTY; GREENBERG TRAURIG LLP; HARRY A; RICHARDS JOHN

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B22D11/00 B22D11/06 B22D11/10 B22D11/112 B22D11/12 B22D11/20 B22D21/04 B22F3/18 B32B15/20 B32B5/16 C22F1/00 (Advanced/Invention); B22D11/06 B22D11/10 B22D21/04 (Advanced/Non–invention); B22D11/00 B22D11/06 B22D11/11 B22D11/12 B22D11/20 B22F3/00 B32B15/20 B32B5/16 C22F1/00 (Core/Invention)

International class (IPC 1–7): B22D11/00 B22D11/06 B22D11/10 B22D11/12 B22D11/124 B22D11/20 B22D25/00

CPC: B22D11/00 B22D11/114 Y10T428/12104 Y10T428/12486 Y10T428/12729 Y10T428/12799 Y10T428/12806 B22D11/0605 B22D11/001 B22D11/003 B22D11/0622

European class: B22D11/00 B22D11/00A B22D11/00A2 B22D11/06B B22D11/06E

US class: 148/522 148/523 148/538 164/428 164/428S 164/432 164/432S 164/433 164/436 164/459 164/479 164/480 164/481 164/481S 164/900 428/559 428/614 428/649 428/659 428/660

Classification Explorer

Cited documents: WO9714520 A1, WO9502708 A1, US7125612 BB, US6672368 BB, US6344096 BA, US6280543 BA, US6193818 BA, US6120621 A, US6044896 A, US5983980 A, US5934359 A, US5772802 A, US5772799 A, US5564491 A, US5518064 A, US5515908 A, US5514228 A, US5496423 A, US5482107 A, US5470405 A, US5370171 A, US5356495 A, US4915158 A, US4828012 A, US4823860 A, US4751958 A, US4341261 A, US4282044 A, US4260419 A, US4238248 A, US4054173 A, US4053173 A, US4002197 A, US2693012 A, JP7148557 A2, JP60027450 A2, JP1202344 A2, JP1202334, EP0380698 A1, DE2443068 A1,

Forward Citations: WO17007458, WO15175403, WO14130088, WO13172912, WO13172912, WO13172910, WO13172910, WO13133978, WO13133976, WO13133960, WO10041791, WO08128061, WO08128055, WO07053808, USRE45414, US9587298, US9528174, US9359660, US9249484, US9194028, US8999079, US8956472, US8757243, US8697248, US8403027, US8381796, US8356655, US8122937, US7846554, US7661458, US7503378, US7503377, US7096922, US7089993, US6880617, US2014367000, US2014000768, US2013334091, US2011130297, US2010119407, US2009145567, US2008254309, US2008251230, US2007137830, US2007095499, US2006225862, US2003230394, KR101511632, JP2010524689, JP2010523338, EP2822717, EP2822716, EP2264198, EP2142324, EP2142324, EP2049287, EP1468761, EA025066, DE102012209568, DE102012209568, DE102012209568, CN105121690, CN104321451, CN104284745, CN104271289, AU2013204114, AU2013203144, AU2013202789, AU2007283438,

Abstract:
Source: US2002153123A A method of continuous casting aluminum alloys between a pair of rolls. Molten aluminum alloy is delivered to a roll bite between the rolls and passes into the roll nip in a semi–molten state. A solid strip of cast aluminum alloy exits the nip at speeds of about 25 to about 400 feet per minute. Thin gauge (0.07–0.25 inch) strip may be produced at rates of up to 2000 pounds per hour per inch of cast strip width.

0) US2004064362A – METHODS OF CONDUCTING PROMOTIONAL CONTESTS AND ...

120) Family number: 30427265 (US2004064362A) © PatBase

Title: METHODS OF CONDUCTING PROMOTIONAL CONTESTS AND BEVERAGE CONTAINERS FOR USE THEREIN

Priority: US20020261962 20021001 WO2003CA01485 20030929

Family:

Publication number	Publication date	Application number	Application date
AU2003271462 AA	20040423	AU20030271462	20030929
BRPI0315017 A	20050809	BR2003PI15017	20030929
CA2500510 AA	20050330	CA20032500510	20030929
CA2500510 C	20090428	CA20032500510	20030929
JP2006505458 T2	20060216	JP20040540411T	20030929
US2004064362 AA	20040401	US20020261962	20021001
US6992586 BB	20060131	US20020261962	20021001
WO04032081 A2	20040415	WO2003CA01485	20030929
WO04032081 A3	20040923	WO2003CA01485	20030929

Probable Assignee: NOVELIS INC

Assignee(s):(std)**:** ALCAN INT LTD ; ROSENFELD ARON M ; NOVELIS INC

Assignee(s): ALCAN INT ; UBS AG ; NOVELIS NO 1 PARTNERSHIP LTD ; NOVELIS NO1 PARTNERSHIP LTD ; UBS STAMFORD BRANCH AG ; ALCAN INTERNATIONAL LIMITED ; BANK OF AMERICA NATIONAL ASSOCIATION ; CITICORP NORTH AMERICA INC ; LASALLE BUSINESS CREDIT LLC ; NOVELIS CAST HOUSE TECHNOLOGY LTD ; NOVELIS CORP

Inventor(s):(std)**:** ROSENFELD ARON M

Inventor(s): ARON M ROSENFELD

Agent(s): KIRBY EADES GALE BAKER; COOPER AND DUNHAM LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/28 B65D17/38 B65D25/20 G06Q30/00 G06Q30/02 G08B13/14 G08B13/24 G09F23/00 H04B5/02 (Advanced/Invention); B65D17/00 B65D17/28 B65D25/20 G06Q30/00 G08B13/14 G08B13/24 H04B5/02 (Core/Invention)

International class (IPC 1–7): B65D17/16 G06F17/60 G08B13/24

CPC: G06K19/07758 G06Q30/02 G06Q30/0207

European class: G06F17/60B2 G06K19/077T3 G06Q30/02 G06Q30/0207

US class: 206/459.5 206/459.500S 220/500 220/500S 340/572.1 340/572.4 340/572.8 340/572.800S 705/14 705/14.1 705/14.100P

Classification Explorer

Cited documents: WO8803302 A1, WO03023706 A1, WO03023705 A1, US6335691 BA, US6298990 BA, US6137413 A, US5954214 A, US5947256 A, US5923242 A, US5909793 A, US5861809 A, US5813563 A, US5754110 A, US5625347 A, US5575383 A, US5464092 A, US5353011 A, US4835524 A, US4673923 A, US4398491 A, US4326198 A, US2002130778 AA, EP1083519 A2, EP0794520 A1, DE20115621 U1,

Forward Citations: WO06105162, USD672235, USD658980, US9428329, US9428328, US8973833, US8807438, US8708188, US8638232, US8570153, US8534490, US8508381, US8493229, US8242915, US7973664, US7772986, US7772981, US7388506, US6995674, US2011102150, US2011100854, US2010265086, US2010219252, US2009134113, US2008111685, US2004178109, JP2007274675, EP2709044,

EP2690586, AT514156,

Abstract:
Source: US2004064362A A method of conducting a promotional contest by providing a portal that establishes a field for detecting the presence of a field−disturbing element, providing packages respectively having and lacking a concealed field−disturbing element, and distributing the packages randomly to different individuals who carry the packages past the portal so that a package with a field−disturbing element causes the portal to produce a signal indicating a winner of the contest. A can for beverages or the like having a field−disturbing element concealed thereon, for use in such a promotional contest. The element may be mounted in a peelable foil closure member covering an aperture in the can lid.

0) US4848582A – SLIDING PACKAGE INCORPORATING AT LEAST ONE RETR...

121) Family number: 5891109 (US4848582A) © PatBase

Title: Sliding package incorporating at least one retractable panel

Priority: CA19870553479 19871203 FR19860007627 19860528 FR19870014540 19871021

Family:

Publication number	Publication date	Application number	Application date
CA1294583 A1	19920121	CA19870553479	19871203
CN1016767 B	19920527	CN19871008307	19871201
CN1032646 A	19890503	CN19871008307	19871201
EP0312669 A1	19890426	EP19870402732	19871202
FR2599333 A1	19871204	FR19860007627	19860528
FR2599333 B1	19891117	FR19860007627	19860528
FR2622173 A2	19890428	FR19870014540	19871021
FR2622173 B2	19900518	FR19870014540	19871021
JP1111675 A2	19890428	JP19870306832	19871203
US4848582 A	19890718	US19870128051	19871203

Probable Assignee: POLEVAL

Assignee(s):(std)**:** DANIERU REBUASAARU ; LEVASSEUR DANIEL ; POGGI PAUL ; POLEVAL ; POORU POJI

Assignee(s): DANIEL LEVASSEUR

Inventor(s):(std)**:** DANIERU REBUASAARU ; POORU POJI ; POGGI PAUL ; LEVASSEUR DANIEL

Inventor(s): PAUL POGGI ; DANIEL LEVASSEUR

Agent(s): ROBIC

Designated states: AT BE CH DE ES FR GB GR IT LI LU NL SE

International class (IPC 8–9): A24F27/12 B65D5/38 B65D73/00 B65D77/24 B65D85/10 (Advanced/Invention); A24F27/00 B65D73/00 B65D77/24 B65D85/08 (Core/Invention)

International class (IPC 1–7): A24F27/00 A24F27/12 A24F27/14 A61J1/03 B31B13/00 B65D5/38 B65D73/00 B65D83/02 B65D83/04 B65D85/10 B65D85/56

CPC: B65D77/24 B65D85/109 A24F27/12

European class: A24F27/12 B65D77/24 B65D85/10K2

US class: 206/104 206/110 206/528 206/534.2

Classification Explorer

Cited documents: US819574 A, US4535890 A, US4192422 A, US4090605 A, US3530977 A, US3452860 A, US3327843 A, US2946432 A, US2737290 A, US2212773 A, US2199476 A, US1961344 A, US1349780 A, FR1121043 A,

Forward Citations: WO0238454, USD578386, USD457246, US9452877, US8602218, US7641050, US7540383, US7090079, US6978894, US6523691, US2012037517, US2009101537, US2007163918, US2004108240, US2004050748, KR100804850, GR89100321, GR890100321, GB2417940, EP1309497, CN102574021, AU2002214485,

Abstract:
Source: US4848582A A package for articles such as matches, medication in tablet form and the like comprises a flat pocket made up of a foldable element and one or more retractable panels. Each retractable panel is able to assume a deployed position in which an article in the package is visible and accessible and an undeployed position in which the article is invisible and inaccessible. The flat pocket comprises a front flap and a rear flap, each retractable panel is attached to but movable relative to the front or rear flap and the articles in the package are distinct from each retractable panel.

0) US2016207661A – FULL APERTURE BEVERAGE END

122) Family number: 62960547 (US2016207661A) © PatBase

Title:	FULL APERTURE BEVERAGE END
Priority:	EP20090169559 20090904 US20100797171 20100609 US20150598886 20150116

Family:

Publication number	Publication date	Application number	Application date
US2016207661 AA	20160721	US20150598886	20150116

Probable Assignee:	CROWN PACKAGING TECHNOLOGY INC
Assignee(s):(std):	CROWN PACKAGING TECHNOLOGY INC
Inventor(s):(std):	CHANT GARRY RICHARD ; FIELDS BRIAN ; HYDE ELEANOR RACHEL ANN ; LOCKLEY ANDREW ROBERT ; RAMSEY CHRISTOPHER PAUL ; WATSON MARTIN JOHN
International class (IPC 8–9):	B65D1/12 B65D17/00 (Advanced/Invention)
CPC:	B65D17/165 B65D1/12 B65D2517/0013 B65D17/163 B65D17/24
US class:	53/492

Classification Explorer

Abstract:
Source: US2016207661A A full aperture beverage end has a center panel, a countersink surrounding the centre panel, a main score arranged in proximity to the countersink to define a removable aperture panel and a vent score. The beverage end is adapted for use with products that are pressurized to over 30 psi (200 kPa) when opened, and during opening the vent score is adapted to sever first, controlling the pressure differential between the external surface and internal surface of the centre panel, thereby allowing the main score to tear in a controlled and reliable manner.

0) US4781303A – CONTAINER WITH A NON–REMOVABLE OPENING TAB APPA...

123) Family number: 2578654 (US4781303A) © PatBase

Title: Container with a non–removable opening tab apparatus

Priority: US19880173600 19880325

Family:

Publication number	Publication date	Application number	Application date
US4781303 A	19881101	US19880173600	19880325

Probable Assignee: WELLS ROBERT A

Assignee(s):(std)**:** WELLS ROBERT A

Inventor(s):(std)**:** WELLS ROBERT A

International class (IPC 8–9): B65D17/34 B65D41/32 (Advanced/Invention); B65D17/28 B65D41/32 (Core/Invention)

International class (IPC 1–7): B65D41/32

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/269

Classification Explorer

Cited documents: US4148409 A, US4039100 A, US3977561 A,

Forward Citations: WO9109784, US5145086, EP0372419,

Abstract:
Source: US4781303A An easy–opening container of the type commonly used to contain beverages has an end wall that includes a score line and a hinge line with the score and hinge lines together defining a partially separable panel section of the end wall. A pull tab has a ring–shaped lift portion at one end, a finger at its other end and a mounting portion intermediate its ends. The pull tab is mounted at its mounting portion to the end wall adjacent the panel section with the lift portion extending from the mounting portion to overlie and partially frame the panel section and with the finger extending away from the panel section to overlie a portion of the end wall. A locking flange depends from the lift portion to lie in confronting relationship with at least a portion of the periphery of the panel section. The finger is constructed and arranged to engage a portion of the end wall upon movement of the lift portion away from the end wall at least partially separating the panel section from the end wall to define an opening therein. The flange is constructed and arranged to move into locking engagement with the edges defining the opening upon subsequent movement of the lift portion toward the end wall so that the pull tab is maintained in a fixed orientation atop the end wall framing the opening.

0) US2014263334A – END CLOSURE WITH A RING PULL ACTUATED SECONDARY...

124) Family number: 57415630 (US2014263334A) © PatBase

Title: END CLOSURE WITH A RING PULL ACTUATED SECONDARY VENT

Priority: US20130794762P 20130315 US20140198174 20140305 WO2014US20821 20140305

Family:

Publication number	Publication date	Application number	Application date
CN105102332 A	20151125	CN201480015945	20140305
CN105102332 B	20161228	CN201480015945	20140305
US2014263334 AA	20140918	US20140198174	20140305
WO14149768 A1	20140925	WO2014US20821	20140305

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP

Inventor(s):(std)**:** SCOTT ANTHONY J

Agent(s): KUGLER BRUCE A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/26 B65B43/39 B65B51/16 B65D17/00 B65D51/16 (Advanced/Invention)

CPC: B65D17/165 B21D51/383 B65D2517/0013 B65D2517/0092

US class: 220/269 220/271 413/14 413/16 413/17

Classification Explorer

Cited documents: WO11053776 A1, US6062414 A, US5494184 A, US5190149 A, US5145086 A, US5131555 A, US4576305 A, US4417668 A, US4397403 A, US4387827 A, US3877606 A, US3442416 A, US3441169 A, US3370169 A, US2012175371 AA, US2012031056 AA, US2010282706 AA, US2010258562 AA, US2008302793 AA, US2007108208 AA, JP2007529374, EP0542517, CN1681711, CN1125679,

Forward Citations: USD762114, USD750488, USD749415, US9233784, US2013118133,

Abstract:
Source: US2014263334A The present invention relates to a container end closure that generally comprises a pour opening and a secondary vent opening which improves venting during emptying of contents from the container. In particular, the present invention relates to an end closure for a container having scores defining a secondary vent opening which may optionally be opened. The secondary vent opening has a significantly larger area then vents of prior art designs and thereby improves pour rate and smoothness of pour. After the pour opening is opened using a pull tab interconnected to the end closure, a consumer may selectively open the secondary vent opening by pulling back on the tab.

0) WO03010054A1 – EASY OPEN CAN END EXTREMITE DE BOITE A BOISSON ...

125) Family number: 28041289 (WO03010054A1) © PatBase

Title: EASY OPEN CAN END

Priority: KR20010021083U 20010712

Family:

Publication number	Publication date	Application number	Application date
KR200249534 Y1	20011117	KR20010021083U	20010712
WO03010054 A1	20030206	WO2002KR01312	20020711

Probable Assignee: AHN YOUNG GI

Assignee(s):(std)**:** AHN YOUNG GI

Inventor(s):(std)**:** AHN YOUNG GI

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

International class (IPC 8–9): B65D17/34 (Advanced/Invention); B65D17/34 (Advanced/Non–invention); B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/34

CPC: B65D17/165 B65D2517/0016 B65D2517/002 B65D2517/0061 B65D2517/0071 B65D2517/5083

European class: B65D17/16B2 L65D517/00Y2D L65D517/00Y2Z L65D517/00Y7A1 L65D517/00Y7B2 L65D517/50Q5

Classification Explorer

Cited documents: US3984025 A, JP11321862 A2,

Forward Citations: WO11001273, WO09130477, US9555922, ITUD20090127, CN102548855,

Abstract:
Disclosed is an easy open can end of a can in which its opening section torn in accordance with the operation of a tab to form a beverage pouring opening is protruded outside the can, thereby eliminating the sanitation problem caused when the opening section is protruded inside the can. The easy open can end includes an opening section defined on an end plate of a can by a score line formed at the end plate, a tab provided at one end thereof with a handle portion, and at the other end thereof with a coupling plate extending inside the tab, and a rivet adapted to couple the coupling plate to the opening section at a position near the score line in a state in which the other end of the tab extends beyond the opening section to a portion of the end plate.

126) Family number: 8501514 (US5427242A) © PatBase

Title: TWO TIER CAN PACKAGE HAVING SECURED DIVIDER PANEL AND METHOD OF FORMING THE SAME

Priority: US19930114813 19930831 WO1994US08884 19940805

Family:

Publication number	Publication date	Application number	Application date
AT188938 E	20000215	AT19940924592T	19940805
AU199474821 A1	19950322	AU19940074821	19940805
AU684815 B2	19980108	AU19940074821	19940805
BRPI9407372 A	19960716	BR1994PI07372	19940805
CA2169566 AA	19960214	CA19942169566	19940805
CA2169566 C	20020129	CA19942169566	19940805
CN1043468 C	19990526	CN19941093241	19940805
CN1129927 A	19960828	CN19941093241	19940805
CZ294423 B6	20050112	CZ19960000546	19940805
CZ9600546 A3	19970115	CZ19960000546	19940805
DE69422719 D1	20000224	DE19946022719	19940805
DE69422719 T2	20000621	DE19946022719T	19940805
DK0715592 T3	20000501	DK19940924592T	19940805
EG20468 A	19990531	EG19940000532	19940829
EP0715592 A1	19960612	EP19940924592	19940805
EP0715592 A4	19971126	EP19940924592	19940805
EP0715592 B1	20000119	EP19940924592	19940805
ES2141247 T3	20000316	ES19940924592T	19940805
GR3033189 T3	20000831	GR20000400883T	20000412
GT199400059 A	19960221	GT19940000059	19940830
HU218176 B	20000628	HU19960000485	19940805
HU74411 A2	19961230	HU19960000485	19940805
HU9600485 A0	19960429	HU19960000485	19940805
IL110704 A0	19941111	IL19940110704	19940818
IL110704 A1	19980208	IL19940110704	19940818
JP3456998 B2	20031014	JP19950508121T	19940805
JP9502948 T2	19970325	JP19950508121T	19940805
MA23600 A1	19960401	MA19940023635	19940831
NZ271240 A	19970224	NZ19940271240	19940805
PE2695 A1	19950301	PE19940248313	19940811
PH30651 A	19970916	PH19940048769	19940810
PL177718 B1	20000131	PL19940313221	19940805
PL313221 A1	19960610	PL19940313221	19940805
PT715592 T	20000428	PT19940924592T	19940805
RU2128612 C1	19990410	RU19960107401	19940805
RU96107401 A	19980627	RU96100007401	19960331
SG46363 A1	19980220	SG19960003581	19940805
SK21696 A3	19970205	SK19960000216	19940805
SK282558 B6	20021008	SK19960000216	19940805
TH11605 B	20020104	TH19941001820	19940830
TH11734 B	20020121	TH19941001702	19940815

TH21113 A	19961015	TH19941001702	19940815	
TH21288 A	19961022	TH19941001820	19940830	
TR28992 A	19970721	TR19940000813	19940824	
TW263477 B	19951121	TW19940107093	19940803	
US5427242 A	19950627	US19930114813	19930831	
WO9506602 A1	19950309	WO1994US08884	19940805	
ZA9405791 A	19950519	ZA19940005791	19940803	

Probable Assignee: MEADWESTVACO PACKAGING SYSTEMS LLC

Assignee(s):(std)**:** MEADWESTVACO PACKAGING SYSTEMS ; MEAD CORP

Assignee(s): MEAD CORP DAYTON ; MEAD THE CORP ; DZE MEAD KORPOREJSHN ; MEADWESTVACO PACKAGING SYSTEMS LLC ; OLIFF JAMES R ; STOUT JAMES T

Inventor(s):(std)**:** DZHEJMS R OLIFF ; DZHEJMS R STAUT ; JAMES R OLIFF ; JAMES T STOUL ; JAMES T STOUT ; OLIFF J R ; OLIFF JAMES R ; OLIFF R ; STOUT J R ; STOUT JAMES R ; STOUT JAMES T ; STOUT R

Inventor(s): James T. ; Oliff ; JAMES R STOUT ; James R.Stout ; JAMES ROLIFF ; DZHEJMS R.OLIFF ; DZHEJMS R.STAUT ; J R OLIFF ; J R STOUT

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; RIDOUT AND MAYBEE LLP; WOLFF BREGMAN AND GOLLER

Designated states: AT AU BE BR CA CH CN CZ DE DK ES FR GB GR HU IE IT JP KR LI LU MC NL NZ PL PT RU SE SK

International class (IPC 8–9): A01N33/18 A61K31/4155 B05C3/08 B65B21/02 B65D5/36 B65D5/54 B65D57/00 B65D65/00 B65D71/00 B65D71/06 B65D71/36 B65D71/38 B65D71/70 B65D75/00 B65D77/26 B65D85/30 B65D85/62 C09D163/00 C09D179/08 H05K9/00 (Advanced/Invention); B65D5/54 B65D57/00 B65D65/00 C08L63/00 C08L79/08 (Advanced/Non–invention); B05C3/02 B65D5/54 B65D57/00 B65D65/00 B65D71/00 B65D71/06 B65D75/00 B65D77/24 B65D85/30 C09D163/00 C09D179/00 H05K9/00 (Core/Invention); C08L63/00 C08L79/00 (Core/Non–invention)

International class (IPC 1–7): A01N33/18 A47F1/04 A61K31/4155 B65B21/02 B65BA B65D5/54 B65D57/00 B65D65/00 B65D71/00 B65D71/06 B65D71/16 B65D71/38 B65D75/00 B65D77/02 B65D77/26 B65D85/30 B65D85/62

CPC: Y10S206/821 B65D71/36 B65D71/70 B65D2571/00141 B65D2571/0032 B65D2571/00425 B65D2571/00574 B65D2571/0066 B65D2571/00728

European class: B65D71/00C1B B65D71/00CA1B B65D71/00E B65D71/36 B65D71/70 L65D571/00Y1A1 L65D571/00Y2B L65D571/00Y3C1C L65D571/00Y5A4 L65D571/00Y6A1 L65D571/00Y7B1

US class: 206/160 206/194 206/197 206/430 206/821

Classification Explorer

Cited documents: WO9506594 A1, US5518111 A, US5246113 A, US5197656 A, US5108030 A, US5020668 A, US4919265 A, US4896774 A, US4848651 A, US4826016 A, US4789063 A, US4577799 A, US4421229 A, US4194678 A, US3904038 A, US3866818 A, US3701466 A, US3565326 A, US3351264 A, US3300041 A, US3072250 A, US3050228 A, US1850714 A,

Forward Citations: WO9856667, WO9851584, WO9622234, WO9601769, WO0104018, US9452874, US9415915, US9394093, US9392888, US9284090, US9132936, US8887952, US8881901, US8851362, US8800853, US8720743, US8646654, US8628000, US8579154, US8550332, US8459535, US8444046, US8408392, US8302811, US8220702, US8181782, US8167194, US8127980, US8127924, US8123072, US8118212, US8025209, US8011564, US7946451, US7909163, US7780003, US7721889, US7717321, US7658317, US7621438, US7614497, US7523842, US7427011, US7401711, US7195118, US7175047, US7168558, US7100798, US7093713, US7073705, US7059494, US7048817, US6991107, US6715639, US6394272, US5996883, US5868252, US5826782, US5772030, US5682984, US5675960, US2011198366, US2011168768, US2010187295, US2010044421, US2009321507, US2009173749, US2009121006, US2009095799, US2009065388, US2007080199, US2006255044, US2006249529, US2006249413, US2006144914, US2006071058, US2005178687, US2005167292, US2005167290, US2005115843, US2004159671, US2004159567, US2003146269, US2002185499, EP1433714, EP0717711, CN102910336, AU751507,

Abstract:
Source: US5427242A A package comprises a plurality of beverage cans arranged into a group of at least two vertically−aligned tiers, a carton disposed around the exterior of the group of the cans, and a divider panel disposed between upper and lower adjacent tiers. Each can has a cylindrical side wall defining an axis. The cans in each tier have their axes disposed vertically and parallel to each other. The carton includes top and bottom panels interconnected by a pair of side panels to form a tubular structure, and a pair of end closure structures disposed to close opposite open ends of the tubular structure. The end closure structures are connected to the tubular structure and are disposed substantially adjacent the side walls of the cans of the group along opposite ends of the group. The divider panel is provided with a pair of anchor flaps which are secured to the end closure structures.

0) US5186348A – CAN END WITH LOCK OPEN AND LOCK CLOSED TAB OPER...

127) Family number: 11057170 (US5186348A) © PatBase

Title: Can end with lock open and lock closed tab operated by a pull ring

Priority: US19910690706 19910424

Family:

Publication number	Publication date	Application number	Application date
US5186348 A	19930216	US19910690706	19910424

Probable Assignee: CAN DO ASSOCIATES

Assignee(s):(std)**:** CAN DO ASSOCIATES

Inventor(s):(std)**:** STEINER JOSEPH D

International class (IPC 8–9)**:** B65D17/34 B65D17/40 B65D43/24 (Advanced/Invention); B65D17/28 B65D43/14 (Core/Invention)

International class (IPC 1–7)**:** B65D17/34 B65D43/24

CPC: B65D17/166

European class: B65D17/16B2B

US class: 220/269 220/270 220/335

Classification Explorer

Cited documents: US4951835 A, US4760934 A, US4687116 A, US4624386 A, US4537326 A, US4407424 A, US4253582 A, US4244488 A, US4232797 A, US4231487 A, US4203528 A, US3952911 A, US3847300 A, US3780902 A, US3441168 A, US3370169 A, US3325043 A,

Forward Citations: WO07085674, WO07085670, USD747649, USD747199, US8857644, US7152753, US2010133275, US2008302756, US2005282066, EP1190952,

Abstract:
Source: US5186348A The present invention provides a beverage container lid which can be attached to a beverage container by a skirt extending about the periphery of the lid. In the body of the lid there is defined by a score line a tear tab with a blunt nose portion. The score line extends along opposite lateral sides to a termination site at opposite sides of a hinge situated in an internal area of the lid body. The hinge retains the tear tab as an integral part with the container line while the tab is controlled as to severing from the remaining part of the lid body by the score lines through operation of a pull ring. The pull ring is hinged to the tear tab generally opposite the hinge between the tab and the lid body so that the ring can be used to readily fracture the tear tab about the score line. The ring is used in conjuction with clips for holding and maintaining the tear tab in an opened as well as a closed position. The clips for engaging with the pull ring to hold the tab is closed position are uniquely situated in relation to the hinge connection between the pull ring and the tear tab so that the tear tab can assume a closed position from its original site with good fluid tight integrity.

0) US5785170A – BEVERAGE CAN TRAY WITH IMPROVED HANDLING FEATUR...

128) Family number: 12331645 (US5785170A) © PatBase

Title: Beverage can tray with improved handling features

Priority: US19960590146 19960123 US19970889267 19970708 US19980111319 19980707

Family:

Publication number	Publication date	Application number	Application date
US5785170 A	19980728	US19970889267	19970708
US6079554 A	20000627	US19980111319	19980707

Probable Assignee: INT CONTAINER SYSTEMS INC

Assignee(s):(std)**:** INT CONTAINER SYSTEMS INC

Assignee(s): INTERNATIONAL CONTAINER SYSTEMS INC ; STATE STREET BANK AND TRUST CO ; INTERTAPE POLYMER CORP ; INTERTAPE POLYMER US INC ; IPG FINANCIAL SERVICES INC ; IPG HOLDINGS LP ; IPG US HOLDINGS INC ; IPG US INC ; POLYMER INT CORP ; WELLS FARGO BANK NATIONAL ASSOCIATION ; BANK OF AMERICA NA ; BANK OF AMERICA NA AGENT AS

Inventor(s):(std)**:** HAMMETT ROY ; HEILMAN DOUGLAS H

International class (IPC 8–9)**:** B65D71/70 (Advanced/Invention)

International class (IPC 1–7)**:** B65D75/00

CPC: B65D71/70

European class: B65D71/00E B65D71/70

US class: 206/203 206/509 220/516

Classification Explorer

Cited documents: WO9117097 A1, USD347722, USD330621, USD329932, USD322917, USD317670, USD208111, US5501352 A, US5495945 A, US5487487 A, US5405042 A, US5316172 A, US5305884 A, US5287966 A, US5285899 A, US5277316 A, US5230601 A, US5188233 A, US5184748 A, US5115937 A, US5105948 A, US5060819 A, US5031774 A, US5031761 A, US4944400 A, US4932532 A, US4928841 A, US4899874 A, US4834243 A, US4789063 A, US4700837 A, US4700836 A, US4625908 A, US4615444 A, US4410099 A, US4373627 A, US4344530 A, US4319685 A, US4204617 A, US4162738 A, US4161259 A, US3791549 A, US3638824 A, US3391815 A, US3391814 A, US3369659 A, US3351264 A, US3349943 A, US3334767 A, US3333727 A, US3155268 A, US3151762 A, US3092284 A, US3009579 A, US2965226 A, US2215252 A, GB2032886 A1, GB1330778 A, GB1197058 A, GB1152038 A, FR1474782 A,

Forward Citations: WO10055204, WO03000006, WO03000006, WO02081324, USD770273, USD759478, USD750975, USD749323, USD747962, USD746675, USD746131, USD743784, USD742218, USD741707, USD741706, USD741705, USD738205, USD730726, USD615758, USD551036, USD516914, USD505014, USD494867, USD487634, USD485756, USD466018, USD465417, USD462522, USD445253, US9586722, US9567133, US9475602, US9428321, US9321572, US9174760, US9114901, US8893891, US8757420, US8636142, US8607971, US8448806, US8353402, US8328009, US8123034, US8109408, US7658278, US7604122, US7549539, US7322475, US7281641, US7207458, US7017746, US6899225, US6892885, US6237758, US6047844, US6021913, US6006912, US2013177381, US2012205263, US2011056861, US2010084297, US2009223854, US2009152158, US2006169620, US2005279651, US2005269239, US2005230281, US2005040069, US2004149611, US2003070957, EP2719631, EP2450285, EP2352686, EP1502020, EP1502020, AU2005201944, AU2002322101,

Abstract:
Source: US5785170A A beverage can tray floor has a plurality of redoubts on its bottom surface for cooperation with the rims of cans in a sub−adjacent tray to impede free sliding movement of an upper tray over the rims of cans in a sub−adjacent tray, while enabling the upper tray to be slid over the cans in the lower tray. The redoubts include at least one elongate, tapered redoubt that extends in spanning relationship to the rim of a can to facilitate initial lateral sliding movement. The tray also has peripheral heel protector bands extending around a bottom portion thereof to protect the heels of cans, and upstanding can spacer members between can seating areas to maintain cans in the tray spaced from one another and prevent displacement of the cans from their seating areas

when the tray is tilted. The sidewall includes a plurality of spaced pillars extending upwardly from the floor and supporting a peripheral top rail. The pillars are omitted and/or shortened in some areas to provide smooth, uninterrupted portions of the top rail which serve as handles. Spaces are defined between the upper ends of at least some of the pillars and the top rail, and upwardly projecting tabs on the upper ends of some of the pillars extend into the spaces when the trays are stacked to prevent wedging of the trays.

0) US2008217347A – BEVERAGE CONTAINER PROTECTIVE COVER

129) Family number: 42146489 (US2008217347A) © PatBase

Title: BEVERAGE CONTAINER PROTECTIVE COVER

Priority: US20070714633 20070306

Family:

Publication number	Publication date	Application number	Application date
US2008217347 AA	20080911	US20070714633	20070306

Probable Assignee: MARKAJ VIKTOR

Assignee(s):(std)**:** MARKAJ VIKTOR

Inventor(s):(std)**:** MARKAJ VIKTOR

Agent(s): VIKTOR MARKAJ

International class (IPC 8–9)**:** B65D41/32 (Advanced/Invention); B65D41/32 (Core/Invention)

CPC: B65D17/166 B65D2517/0011 B65D2517/0025 B65D2517/0029 B65D2517/0041

European class: B65D17/16B2B L65D517/00Y2A L65D517/00Y3B L65D517/00Y4B L65D517/00Y5D1

US class: 220/713

Classification Explorer

Cited documents: US7198168 BB, US7089825 BB, US6722518 BA, US6626314 BA, US6098830 A, US6059137 A, US5813559 A, US5779087 A, US5462189 A, US5279841 A, US5139163 A, US5080249 A, US2007138178 AA, US2007131690 AA, US2005236411 AA, US2005051553 AA, US2002088802 AA,

Forward Citations: USD672235, USD658980, USD640141, US8708188, US8534490, US2012012586, US2011100854, GB2482504,

Abstract:
Source: US2008217347A The present invention provides a protective beverage cover for use in combination with a beverage can having a rim wall, a top wall, an unpunctured score–line defining an opening, a recessed base surrounding the unpunctured score–line, an annular groove formed by the junction of the rim wall and the top wall, and a ring pull tab. The protective cover comprises an overhanging lip which extends downward into the groove to allow rotation of the cover along the top wall and which permits covering of the area of the top wall which directly or indirectly engages a consumer's mouth during drinking of the beverage contents. A protrusion is formed by the upward extension of a central portion of the overhanging lip allows for rotation of the cover. A depression countered to sealably rest inside the recessed base surrounding the opening. The protective cover permits a second beverage container to be stacked on top of the first container by not interfering with the rim wall and by utilizing the annular groove.

0) US3908857A – TAPE SEAL FOR CONTAINER

130) Family number: 19177550 (US3908857A) © PatBase

Title: Tape seal for container

Priority: AU19750080265 19750417 US19740507036 19740918 US19740514039 19741011 US19740514703 19741015 US19750622302 19751014

Family:

Publication number	Publication date	Application number	Application date
AR210865 A1	19770930	AR19750260330	19750910
AU197580158 A1	19761002	AU19750080158	19750415
AU197580265 A1	19761104	AU19750080265	19750417
BE833482 A2	19760317	BE19751006889	19750917
BE834331 A2	19760409	BE19751006941	19751009
BR7504683 A	19760803	BR19750004683D	19750722
CA1036107 A1	19780808	CA19750219842	19750211
CA1038799 A1	19780919	CA19750222362	19750318
CH591375 A	19770915	CH19750012032	19750917
DE2519709 A1	19760408	DE19752519709	19750502
DE2519709 B2	19790712	DE19752519709	19750502
DK146921 B	19840213	DK19750004164	19750917
DK146921 C	19840716	DK19750004164	19750917
DK416475 A	19760319	DK19750004164	19750917
ES212009 U	19760601	ES19750212009U	19750429
ES212009 Y	19761101	ES19750212009U	19750429
ES213833 U	19760701	ES19750213833U	19750707
ES213833 Y	19770116	ES19750213833U	19750707
ES439207 A1	19770216	ES19750439207	19750707
FI59766 B	19810630	FI19750000268	19750131
FI59766 C	19811012	FI19750000268	19750131
FI750268 A	19760319	FI19750000268	19750131
FI750552 A	19760412	FI19750000552	19750226
FI750553 A	19760416	FI19750000553	19750226
FR2287391 A1	19760507	FR19750020378	19750627
FR2288036 A1	19760514	FR19750021244	19750707
FR2291098 A1	19760611	FR19760005814	19760302
FR2291098 B1	19811231	FR19760005814	19760302
FR2299229 A1	19760827	FR19750019691	19750624
FR2299229 B1	19810821	FR19750019691	19750624
GB1501162 A	19780215	GB19750037155	19750909
GB1532975 A	19781122	GB19750041782	19751013
HK18780 A	19800418	HK19800000187	19800410
HK25880 A	19800523	HK19800000258	19800515
IN144036 A	19780311	IN1975CA01969	19751010
IT1044057 A	19800320	IT19750027317	19750917
JP1102658 C3	19820625	JP19750065191	19750530
JP51037785 A2	19760330	JP19750065191	19750530
JP56043940 B4	19811016	JP19750065191	19750530
NL177196 B	19850318	NL19750010955	19750917
NL177196 C	19850816	NL19750010955	19750917

NL7510955 A	19760322	NL19750010955	19750917	
NL7511826 A	19760413	NL19750011826	19751008	
NO752842 A	19760319	NO19750002842	19750815	
SE423079 B	19820413	SE19750009360	19750822	
SE423079 C	19820722	SE19750009360	19750822	
SE7509360 A	19760319	SE19750009360	19750822	
SE7509360 L	19760319	SE19750009360	19750822	
US3908857 A	19750930	US19740514703	19741015	
US3990615 A	19761109	US19740507036	19740918	
US4029033 A	19770614	US19750622302	19751014	
ZA7500899 A	19760929	ZA19750000899	19750212	
ZA7500900 A	19760929	ZA19750000900	19750212	
ZA7501453 A	19761027	ZA19750001453	19750310	

Probable Assignee: CONTINENTAL GROUP

Assignee(s):(std)**:** CONTINENTAL CAN CO ; CONTINENTAL CAN CO INC ; CONTINENTAL CAN CO YNC ; CONTINENTAL GROUP ; CONTINENTAL CAN COMPANY INC TE NEW YORK ; CONTINENTAL CAN COMPANY INC TE NEW YORK NEW YORK V ; CONTINENTAL CAN INC ; CONTINENTAL CAN COMPANY INC ; CONTINENTAL CAN COMPANY YNC

Assignee(s): CONTINENTAL CAN COMPANY INC TE NEW YORK NEW YORK VER ST V AM ; THE CONTINENTAL GROUP INC ; THE CONTINENTAL GROUP INC NEW YORK N Y V ST A ; KERWIN JOSEPH E ; ERLANDSON PAUL M ; CONTINENTAL CAN CY INC ; CONTINENTAL GROUP INC NEW YORK N Y V ST A ; CONTINENTAL GROUP INC ; CHIAPPE WAYNE T

Inventor(s):(std)**:** CHIAPPE W ; CHIAPPE W T ; CHIAPPE WAYNE T ; ERLANDSON P ; ERLANDSON P M ; ERLANDSON P M K ; ERLANDSON PAUL M ; CHIAPPE WAYNE THOMAS ; ERLANDSON PAUL MCKILLOP ; F C NEWMAN ; J E KERWIN ; JOSEFU EDOWAADO KAAUIN ; KERWIN J ; KERWIN J E ; KERWIN JOSEPH E ; HOORU MATSUKUKIROTSUPU AARANDO ; KERWIN JOSEPH EDWARD ; NEWMAN F ; NEWMAN F C ; NEWMAN FC ; NEWMAN FRED C ; P M ERLANDSON ; W T CHIAPPE

Inventor(s): C NEWMAN FRED ; PAUL MCKILLOP ERLANDSON ; T CHIAPPE WAYNE ; NEWMAN FRED C LA GRANGE PARK ; M ERLANDSON PAUL ; HOORU MATSUKUKIROTSUPU AARANDOSON ; KERWIN JOSEPH E WESTERN SPRINGS ; JOSEPH E KERWIN AND PAUL M ERLANDSON ; JOSEPH EDWARD KERWIN ; FRED C NEWMAN ; E KERWIN JOSEPH ; ERLANDSON PAUL M PALOS PARK ; CHIAPPE WAYNE T HINSDALE

International class (IPC 8–9): B21D51/44 B65D17/50 B65D47/10 B65D53/08 B65D77/30 (Advanced/Invention); B21D51/38 B65D17/00 B65D47/06 B65D77/22 (Core/Invention)

International class (IPC 1–7): B21D51/38 B21D51/44 B29C B65D11/06 B65D17/02 B65D17/06 B65D17/16 B65D17/20 B65D17/24 B65D17/46 B65D17/50 B65D19/30 B65D25/38 B65D39/00 B65D41/00 B65D43/00 B65D47/00 B65D47/04 B65D47/06 B65D47/10 B65D47/36 B65D51/00 B65D51/14 B65D51/14 B65D51/20 B65D53/08 B65D77/30 B65D83/06 B65D85/72 B67B7/00 C09J5/00

CPC: B65D2517/5008 B65D2517/5029 B65D2517/5078 B65D17/502 B65D2231/02 B65D2231/022 B65D2517/0013 B65D2517/0049 B65D2517/0062 B65D2517/0094 B65D2517/5005 B65D2517/5032 B65D2517/5059 B65D2517/5083 Y10T29/49885

European class: B65D17/50A1 L65D231/02 L65D231/02A L65D517/00Y2B L65D517/00Y6A L65D517/00Y7A1A L65D517/00Y8B L65D517/50M1 L65D517/50M10A1 L65D517/50M10B L65D517/50M2 L65D517/50P3 L65D517/50Q1A L65D517/50Q5

US class: 113/121C 156/69 220/260 220/269 220/359 220/359.2 220/359.3 222/485 222/541 222/541.1 222/541.9 222/563 29/458

Classification Explorer

Cited documents: US3927793 A, US3889844 A, US3883034 A, US3807595 A, US3804287 A, US3711011 A, US3666138 A, US3547305 A, US3292828 A, US3281024 A, US3251509 A, US3187932 A, US2870935 A, US2738916 A,

Forward Citations: WO9641743, WO9320854, WO9315773, WO7901094, WO13068594, USD582274, USD582273, USD533452, USD532691, USD532298, USD530610, USD513452, USD509426, USD456292, USD444385, USD439534, US9656032, US9649455, US9265901, US9242057, US9168343, US9032953, US8973784, US8944285,

US8869735, US8662075, US8596265, US8578934, US8505773, US8490818, US8327847, US8240935, US8181591, US8157128, US8141550, US8082873, US8079362, US8074643, US8074594, US8057118, US7984826, US7886934, US7757688, US7743945, US7650883, US7621273, US7597102, US7584712, US7575130, US7568481, US7543582, US7516738, US7341057, US7111749, US7100530, US7004164, US6997349, US6988642, US6953039, US6938796, US6926002, US6886707, US6786447, US6761161, US6745760, US6729330, US6561384, US6544613, US6435372, US6412637, US6382785, US6336453, US6328037, US6321927, US6305546, US6164769, US6161724, US6142339, US6082358, US5887742, US5688544, US5304265, US5299701, US5271892, US5261548, US5199613, US5110041, US5013516, US4853735, US4762246, US4723391, US4582216, US4577777, US4564121, US4562936, US4557398, US4537326, US4529468, US4526291, US4520923, US4500011, US4494681, US4478667, US4473168, US4462507, US4332846, US4324343, US4253587, US4228633, US4176760, US4167234, US4165004, US4164303, US4155481, US4141468, US4135637, US4131211, US4091957, US3990603, US3985261, US2011226771, US2011220649, US2008197153, US2007177929, US2007007310, US2004140240, US2004118847, US2004079765, US2004000573, US2003213803, JP57163643, JP57028749, JP54028642, GB2306937, GB2304673, GB2168312, GB2168312, GB2063205, FR2470086, FR2432445, FR2401068, FR2398670, EP0223094, EP0185516, EP0113698, EP0105026, EP0030649, EP0003603, DE9316645, DE9305280, DE3927466, DE3714949, DE3233106, DE3118639, DE3101084, DE3043933, DE2950214, DE2926110, DE2826612, DE2624454, DE19506953, DE19506953,

Abstract:
Source: US3908857A A tape seal end closure for closing pour openings in the end panel of a container. The tape is of rectangular configuration applied to a round end panel and to cover all of the openings extends to an area proximate the circular peripheral seaming chuck guide groove in the end panel. The tape is provided with a ring pull which is folded over the tape and forms corners with the body portion of the tape at its lateral edges. These corners, when the body portion is positioned to adequately cover all of the pour openings in the end panel project over and encroach upon the chuck guide groove since the proximate edge of the body portion of the tape extends chordally with respect to the groove. Cutting off these corners develops notches which concentrate failure – promoting stresses causing the tape to tear and thus frustrating opening of the container. The invention solves the problem by providing novel dart folds in these corners which clear the groove and which unfold when the ring pull is lifted thereby developing the full strength of the tape.

0) US4026226A – PRESS APPARATUS AND METHOD UTILIZING SAME

131) Family number: 31050995 (US4026226A) © PatBase

Title: Press apparatus and method utilizing same

Priority: JP19760178836U 19761228 US19760662905 19760301 US19760662906 19760103 US19780883174 19780303 US19770764213 19770131

Family:

Publication number	Publication date	Application number	Application date
AU197619132 A1	19780504	AU19760019132	19761029
AU197722146 A1	19780817	AU19770022146	19770210
AU502588 B2	19790802	AU19770022146	19770210
FR2337085 A1	19770729	FR19760039739	19761231
FR2337085 B3	19801107	FR19760039739	19761231
GB1531169 A	19781101	GB19760053753	19761223
GB1531170 A	19781101	GB19770037490	19761223
IT1115838 A	19860210	IT19770048252	19770301
JP52116471 U1	19770903	JP19760178836U	19761228
JP52117686 U1	19770906	JP19770004257U	19770119
JP57053217 Y1	19821118	JP19760178836U	19761228
JP57053217 Y2	19821118	JP19760178836U	19761228
JP59008877 Y2	19840319	JP19770004257U	19770119
US4026226 A	19770531	US19760662905	19760301
US4166424 A	19790904	US19780883174	19780303

Probable Assignee: AMERICAN NATIONAL CAN CO

Assignee(s):(std)**:** AMERICAN CAN CO ; AMERICAN CAN COMPANY ; AMERICAN CAN CY

Assignee(s): AMERICAN CAN PACKAGING INC ; AMERICAN NATIONAL CAN CO ; AMERICAN CAN

Inventor(s):(std)**:** ALBERT J MALMSTROM ; JA ROBERT ; KL HAHN ; KURT L HAHN ; ROBERT J ALLEN ; ROBERT J A ; HAHN K L ; MALMSTROM ALBERT J ; HAHN KURT L ; ALLEN ROBERT J

Inventor(s): K L HAHN ; J A ROBERT

International class (IPC 8–9)**:** B21D28/02 B21D43/16 B21D51/38 B21D51/44 B26D5/20 B30B13/00 B30B7/00 B65D17/28 B65D17/32 B65D53/06 (Advanced/Invention); B21D28/02 B21D43/02 B21D51/38 B26D5/20 B30B13/00 B30B7/00 B65D17/28 B65D53/00 (Core/Invention)

International class (IPC 1–7)**:** B21D28/02 B21D43/05 B21D43/16 B21D51/44 B30B13/00 B30B15/30 B30B7/00 B30B7/02 B30B7/04 B65D17/00 B65D17/16 B65D17/24 B65D17/28 B65D53/06 B65D7/34 B65G59/06

CPC: B65D17/161 B65D2205/00 B21D43/16 B21D51/383

European class: B21D43/16 B21D51/38B B65D17/16B L65D205/00

US class: 113/114BE 221/268 413/12 413/14 413/25 413/49 413/66 413/8 72/405.06 72/455

Classification Explorer

Cited documents: US4019452 A, US3702103 A, US3683834 A, US3550546 A, US3528575 A, US3369387 A, US3128731 A, US3011464 A, US2869177 A, US2675117 A, US2386845 A, US2332531 A, US2297730 A, US1784745 A, US1754463 A, US1750391 A, US1133383 A, US1131974 A, US1013344 A, JP48071065 U1, JP47029957 A2,

Forward Citations: WO06017953, USRE33061, US9242289, US7779985, US7431064, US7344347, US7331281, US7237999, US7237998, US7234907, US7063492, US7063492, US6802683, US6533518, US6390749, US6386814, US6170309, US6022179, US5967740, US5660516, US5611235, US5511920, US5102278, US5067341, US5017072, US4932822, US4862722, US4799846, US4760729, US4723882, US4627265, US4599884, US4567746, US4454743, US4416133, US4382737,

US4380857, US4305268, US4238950, US4210091, US4208976, US2012082529, US2008267736, US2007258803, US2007186588, US2006180035, US2003053890, KR101285035, JP62168621, JP2016517353, FR2602166, FR2516445, EP1986802, EP1986802, EP1291126, EP0941830, EP0542310, EP0416453, EP0351158, EP0281777, EP0161651, EP0149185, EP0105726, DE3744956, DE3736513, DE3627179, DE3510105, DE10066014, DE10066012, AU575647,

Abstract:
Source: US4026226A An inverted conversion press for producing easy−open metal container ends is provided, which combines the functions of end and tab presses. The press includes a tab forming station and an end forming station, disposed one beneath the other and rendered alternately operative by a vertically−reciprocable slide assembly. A method for producing an article, comprised of assembled workpieces, is also provided.

0) US4311249A – CONTAINER WITH RELEASABLE CLOSURE

132) Family number: 1358322 (US4311249A) © PatBase

Title: Container with releasable closure

Priority: CA19790332799 19790730 EP19790301530 19790731 GB19780032266 19780804

Family:

Publication number	Publication date	Application number	Application date
AT1229 E	19820715	AT19790301530T	19790731
AU197949454 A1	19800207	AU19790049454	19790801
CA1132469 A1	19820928	CA19790332799	19790730
DE2963159 D1	19820812	DE19792963159	19790731
DK324879 A	19800205	DK19790003248	19790801
EP0008191 A1	19800220	EP19790301530	19790731
EP0008191 B1	19820623	EP19790301530	19790731
JP55064045 A2	19800514	JP19790099360	19790803
NZ191166 A	19830617	NZ19790191166	19790730
US4311249 A	19820119	US19790062780	19790801
ZA7903899 A	19800730	ZA19790003899	19790730

Probable Assignee: JOYCE MF

Assignee(s):(std)**:** JOYCE M ; JOYCE M F ; JOYCE MICHAEL F ; JOYCE MICHAEL FRED

Assignee(s): JOYCE MF

Inventor(s):(std)**:** JOYCE M ; JOYCE M F ; JOYCE MICHAEL F ; JOYCE MICHAEL FRED ; MAIKERU FURETSUDO JIYOISU

Inventor(s): MICHAEL FRED JOYCE

Designated states: AT BE CH DE FR GB IT LU NL SE

International class (IPC 8–9): B21D51/38 B65D17/28 B65D17/32 B65D53/02 (Advanced/Invention); B21D51/38 B65D17/28 B65D53/00 (Core/Invention); B21D B65D B67B (Subclass/Invention)

International class (IPC 1–7): B21D51/38 B65D17/16 B65D17/28 B65D17/32 B65D53/02 B67B

CPC: B65D17/161 B65D2205/00

European class: B65D17/16B L65D205/00

US class: 220/268

Classification Explorer

Cited documents: US4134517 A, US4128186 A, US4105134 A, US4054228 A, US3935961 A, US3931909 A, US3759206 A, US3355058 A, US3262611 A, US2261117 A, JP47008695 A2,

Forward Citations: US5535911, US4802603, US4359170, JP62125748, FR2602485, EP0256920, DE9302937,

Abstract:
Source: US4311249A A container comprising a sheet metal wall portion (a) having a closure formed therein, the closure comprising a slit (s) in said wall portion (a) the margins of which by cold working have been caused to overlap to provide overlapping surfaces (b), (g) which cooperate to close the container, the wall portion (a) being deformable by manual pressure on a part (c) thereof remote from the closure to move said overlapping surfaces (b), (g) apart to define an opening (q) therebetween.

0) US5647499A – BEVERAGE CAN ASSEMBLY WITH STRAW RETENTION MEAN...

133) Family number: 13143951 (US5647499A) © PatBase

Title: BEVERAGE CAN ASSEMBLY WITH STRAW RETENTION MEANS

Priority: US19960618169 19960319

Family:

Publication number	Publication date	Application number	Application date
US5647499 A	19970715	US19960618169	19960319

Probable Assignee: PIAZZA JOHN

Assignee(s):(std)**:** PIAZZA JOHN

Inventor(s):(std)**:** PIAZZA JOHN

International class (IPC 8–9)**:** B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7)**:** B65D17/34

CPC: B65D17/165 B65D2231/02 B65D2517/0007 B65D2517/0014 B65D2517/0056 B65D2517/0082 B65D2517/0083 Y10S220/906

European class: B65D17/16B2 L65D231/02 L65D517/00Y1C L65D517/00Y2C L65D517/00Y6Z L65D517/00Y7D1 L65D517/00Y7D2

US class: 220/269 220/705 220/906 D9/518 D9/717

Classification Explorer

Cited documents: US5494184 A, US5375729 A, US5285919 A, US5031264 A, US4948009 A, US4717039 A, US3295715 A, US3263855 A,

Forward Citations: WO17065425, WO07019592, USD754386, USD655121, USD638244, USD603206, USD521871, USD519843, USD511686, USD462010, USD457613, USD455278, USD443053, USD440288, USD434840, USD430343, USD428524, US9181007, US9078535, US9038845, US8939312, US7395676, US6443324, US5743445, US2009095752, US2009026201, US2006032259, US2004094550, US2003213803, US2003168455, KR101638292, KR101036709,

Abstract:
Source: US5647499A A beverage can assembly adapted for use in association with a straw, the apparatus comprises a beverage can having an upper lid, a bend down panel being formed within the upper lid; and a pull tab being pivotally coupled to the upper lid, the pull tab including a straw retainer, in an operative orientation a user lifting the pull tab thereby forcing the bend down panel downward to define an opening in the upper lid, a user then pivoting the pull tab 180 degrees whereby the pull tab covers the opening, a user then positioning a straw through the straw retainer to secure the straw in a fixed orientation.

0) US2015251803A – END CLOSURE WITH LARGE OPENING RING PULL TAB

134) Family number: 60278595 (US2015251803A) © PatBase

Title: END CLOSURE WITH LARGE OPENING RING PULL TAB

Priority: US20140949404P 20140307 US20150641035 20150306 WO2015US19265 20150306

Family:

Publication number	Publication date	Application number	Application date
CN106132837 A	20161116	CN201580017661	20150306
JP2017512163 T2	20170518	JP20160573709T	20150306
US2015251803 AA	20150910	US20150641035	20150306
WO15134913 A1	20150911	WO2015US19265	20150306

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP

Inventor(s):(std)**:** RAYBURN ROBERT M

Agent(s): ONDA MAKOTO; ONDA HIRONORI; KUGLER BRUCE A

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9)**:** B21D51/38 B21D51/44 B65D17/00 B65D17/34 (Advanced/Invention)

CPC: B65D17/165 B65D2101/00 B21D51/443 B21D51/383

US class: 220/270 413/14 413/16

Classification Explorer

Cited documents: US7591392 BB, US5934498 A, US4815626 A, US4747511 A, US4503989 A, US3762598 A, US3672535 A, US3667643 A, US3643832 A, US3441168 A,

Abstract:
Source: US2015251803A An end closure for food and beverage containers is provided. The end closure comprises a central panel with a large opening defined by a score line. The end closure further comprises a ring pull tab operably interconnected to the central panel proximate to a peripheral edge of the central panel. Prior to opening the end closure, a tail end of the ring pull tab is positioned over the tear panel. In some embodiments, the tear panel may completely detach from the end closure upon opening.

0) US2015136776A – CONTAINER END CLOSURE WITH A SCORE FEATURE

135) Family number: 59283670 (US2015136776A) © PatBase

Title: CONTAINER END CLOSURE WITH A SCORE FEATURE

Priority: US20130906796P 20131120 US20140549078 20141120 WO2014US66651 20141120

Family:

Publication number	Publication date	Application number	Application date
AU2014352940 AA	20150528	AU20140352940	20141120
CA2929949 AA	20160506	CA20142929949	20141120
CN105745156 A	20160706	CN201480062967	20141120
EP3071491 A1	20160928	EP20140864608	20141120
EP3071491 A4	20170329	EP20140864608	20141120
MX2016005873 A1	20160713	MX20160005873	20141120
US2015136776 AA	20150521	US20140549078	20141120
WO15077469 A1	20150528	WO2014US66651	20141120

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP

Assignee(s): CHASTEEN HOWARD C ; JACOBER MARK A ; SCOTT ANTHONY J

Inventor(s):(std)**:** CHASTEEN HOWARD C ; JACOBER MARK A ; SCOTT ANTHONY J

Inventor(s): ANTHONY J SCOTT ; MARK A JACOBER ; HOWARD C CHASTEEN

Agent(s): MADDERNS PATENT AND TRADE MARK ATTORNEYS; SMART AND BIGGAR; EISENFUEHR SPEISER; PEARSON KENDRIA E

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/38 B65D17/00 B65D17/28 B65D17/34 B65D51/16 (Advanced/Invention)

CPC: B65D17/165 B21D51/383 B65D2517/0089 B65D2517/0094

US class: 220/269 413/16 413/17

Classification Explorer

Cited documents: US6024239 A, US5219257 A, US2013118133 AA, US2012205378 AA, US2004065663 AA, EP1072336 A2, CN103140423 A,

Forward Citations: USD762114, USD750488, USD749415, US9446879, US9233784, US2013118133,

Abstract:
Source: US2015136776A An end closure for food and beverage containers is provided. The end closure comprises a score fracture force reduction feature. Thus, less force is required by a user to fracture the score and open the opening in the end closure. In one embodiment, the score fracture force reduction feature is a collapsible form raised above the center panel and having a score line and a coined area.

0) WO03004192A1 – METHOD OF MANUFACTURING AN ALUMINUM DESIGN TAB ...

136) Family number: 24696904 (WO03004192A1) © PatBase

Title: METHOD OF MANUFACTURING AN ALUMINUM DESIGN TAB END USING LAMINATING FILMS FOR A BEVERAGE CAN

Priority: KR20010021329 20010420

Family:

Publication number	Publication date	Application number	Application date
KR100397453 B1	20030917	KR20010021329	20010420
KR20010068083 A	20010713	KR20010021329	20010420
WO03004192 A1	20030116	WO2002KR00732	20020420

Probable Assignee: SOLUTION INC C

Assignee(s):(std)**:** CHUNG HYUNG DONG ; SOLUTION INC C

Assignee(s): C SOLUTION INC

Inventor(s):(std)**:** JUNG HYEONG DONG ; CHUNG HYUNG DONG

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW

International class (IPC 8–9): B21D51/38 B65D41/32 (Advanced/Invention); B65D41/32 (Advanced/Non–invention); B21D51/38 B65D41/32 (Core/Invention)

International class (IPC 1–7): B21D51/38 B65D41/32

CPC: B21D51/383 B65D2517/0053

European class: B21D51/38B L65D517/00Y6B1

Classification Explorer

Cited documents: US6105806 A, US4380129 A, KR200216365 Y1,

Forward Citations: CN102774158,

Abstract:
The present invention relates to a method for manufacturing a design tab end of a beverage can with a laminating film, in which the laminating film printed with designs such as logo of a company or a mascot is gilded on the upper part of a tab stock to be formed to a tab afterward, before a forming process of aluminum tab coil, whereby the productivity and exactness of the product is enhanced to raise the quality of the product. The method for manufacturing the tab end comprises the steps of, gilding a laminating film on an exact surface position of an aluminum tab coil that is to be formed to a tab through the tab forming process; coating a varnish for preventing a deterioration of printing quality during forming and distribution of a product, on the surface of the tab coil on which the laminating film has been gilded; arranging a pitch of the tab coil so that the design of the tab coil that has been coated with the varnish is positioned exactly; press–forming the arranged tab coil with a conversion press; and stacking the tab formed by the press–forming to join the tab on a center of a shell that has been fed previously.

0) WO06098597A1 – METHOD OF MANUFACTURING A PROMOTION TAB END FOR...

137) Family number: 33366742 (WO06098597A1) © PatBase

Title: METHOD OF MANUFACTURING A PROMOTION TAB END FOR A CAN

Priority: KR20050022048 20050317

Family:

Publication number	Publication date	Application number	Application date
KR100614464 B1	20060822	KR20050022048	20050317
WO06098597 A1	20060921	WO2006KR00966	20060316

Probable Assignee: LEE DO HEE

Assignee(s):(std)**:** LEE DO HEE

Inventor(s):(std)**:** LEE DO HEE

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KZ LC LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B21D51/38 (Advanced/Invention); B21D51/38 (Advanced/Non–invention); B21D51/38 (Core/Invention)

CPC: B21D51/383

European class: B21D51/38B

Classification Explorer

Cited documents: US6524048 BA, US6105806 A, KR20020062250 A, KR20010088467 A, KR20010070849 A, KR20010044404 A, JP2000246881 A2,

Forward Citations: WO14152858, KR100788881, JP2013533121, CN105026169, CN103108710, CN103108710,

Abstract:
The present invention relates to a method for manufacturing a promotion tab end fora beverage can, which is both for enhancing the marketability of canned beverage byprinting a logo, a picture or any specific design on the front side of a tab, stacked ona can end, that functions as an opener, and for the promotional events by marking variousfigures, characters, alphabets or letters in other languages, serial numbers,or random cords on the rear side of the tab, which is applicable, for instance, ina way of using the tab as a token or ticket in drawing the lots for promotion goods. Moreprecisely, the present invention provides a method of manufacturing a tab endof a beverage can with a process of printing a tab coil having a series of operations; measuringautomatically the numerical changes in outer diameter of the coil loaded on anuncoiler and a recoiler; controlling the speed and frequency of revolution simultaneouslythrough a control unit of a printing process. Therefore, it empowers to keep aconstant transfer interval, transfer speed and coil tension, thereby it notonly increases proficiency of the whole printing process and qualify of the productthrough simplifying the structure of its printing equipment which permits costreduction additionally, but also allows to make the printing work of the frontside and marking on the rear side of the tab in succession for the promotion of cannedbeverage or overaE marketing for a company. The present invention includesan operation of cutting precise parts of a tab coil using a tab coil start–cutter inorder to fix its location in the tab on which the intended designs are printed inthe process of feeding a tab coil into a conversion press for production of a finishedpromotion tab end.

0) WO9948630A3 – SHEET–METAL CLOSING LID WITH SLIGHTLY INCLINED ...

138) Family number: 20774977 (WO9948630A3) © PatBase

Title: SHEET–METAL CLOSING LID WITH SLIGHTLY INCLINED SURFACE AREA AND TOOL FOR PRODUCING THE SAME

Priority: DE19981012671 19980323 DE19981033492 19980724 WO1999DE00826 19990322

Family:

Publication number	Publication date	Application number	Application date
AU199941299 A1	19991018	AU19990041299	19990322
BRPI9908952 A	20001128	BR1999PI08952	19990322
CA2325419 AA	20000922	CA19992325419	19990322
CN1091012 C	20020918	CN19998004233	19990322
CN1293602 A	20010502	CN19998004233	19990322
DE19833492 A1	19990930	DE19981033492	19980724
EP1082184 A2	20010314	EP19990924666	19990322
PL343415 A1	20010813	PL19990343415	19990322
WO9948630 A2	19990930	WO1999DE00826	19990322
WO9948630 A3	19991111	WO1999DE00826	19990322

Probable Assignee: SCHMALBACH LUBECA

Assignee(s):(std)**:** HEINECKE DIETER ; SCHMALBACH LUBECA ; SCHMALBACH LUBECA A G ; SCHMALBACH LUBECA AG ; STRUBE LUTZ

Inventor(s):(std)**:** DIETER HEINECKE ; HEINECKE DIETER ; LUTZ STRUBE ; STRUBE LUTZ

Agent(s): MARKS AND CLERK

Designated states: AT AU BA BE BR CA CH CN CY CZ DE DK ES FI FR GB GR IE IT KR LU MC MX NL PL PT SE TR US YU

International class (IPC 8–9): B21D22/02 B21D51/38 B21D51/44 B65D17/00 B65D17/32 B65D17/34 (Advanced/Invention); B21D51/38 B65D17/00 B65D17/28 (Core/Invention)

International class (IPC 1–7): B21D1/00 B21D22/02 B21D51/26 B21D51/44 B65D17/00 B65D17/32

CPC: B21D51/383 B65D17/165

European class: B21D51/38B B65D17/16B2

Classification Explorer

Cited documents: WO9510373 A1, US5749488 A, US5219257 A, US5038956 A, US4901880 A, US4280427 A, US3799388 A, US3674171 A, GB2153330 A1, FR2687372 A1, DE2303943 A1,

Forward Citations: RU2514608, EP1072336,

Abstract:
The purpose of the present invention is to ensure the lowering of an opening area as well as the generation of a resistance to an upper compression in closing lids while avoiding buckling–type mechanical deformation of the lowered area during the application of an extended and high–pressure compression from below. To this end, a sheet–metal closing lid for beverage cans comprises from the inside towards the outside a lid surface (10), a peripheral groove (20) and a seamed collar (21). At the level of the lid surface, a flat area (40) is adapted to the shape of a gripping tab (9) and of an opening area (8), and is in a lower position relative to the plane of the lid surface (10). This flat area (40) comprises elongated (42, 43) and short (45, 46) edge areas for defining the same relative to the non–lowered remaining part. One at least of the short edge areas (45) rises slightly (alpha) from the plane of the lowered flat area (40) towards the plane of the lid surface (10) located above so as to define a transition area capable of elastic deformation upon the application of an extended compression from the lower side of the lid. This invention also relates to a tool comprising a plurality of individual punches (G, R, H, S) for deforming the lid.

0) GB1533959A – METHOD OF MAKING CONTAINER END CLOSURES

139) Family number: 4865079 (GB1533959A) © PatBase

Title: METHOD OF MAKING CONTAINER END CLOSURES

Priority: GB19770010783 19770315

Family:

Publication number	Publication date	Application number	Application date
GB1533959 A	19781129	GB19770010783	19770315

Probable Assignee: AMERICAN CAN CO

Assignee(s):(std)**:** AMERICAN CAN CO

International class (IPC 8–9)**:** B21D51/38 B21D51/44 (Advanced/Invention); B21D51/38 (Core/Invention)

International class (IPC 1–7)**:** B21D51/44

CPC: B21D51/383 B65D17/161 B65D2205/00

European class: B21D51/38B B65D17/16B L65D205/00

Classification Explorer

Forward Citations: WO10130820, US9199763, US9016034, JP2012526713,

Abstract:
Source: GB1533959A 1533959 Making easy open can end closures AMERICAN CAN CO 15 March 1977 10783/77 Heading B3A A can end closure having an inwardly opening easy–open tab is made from a blank having a plane central panel by forming a bulge, cutting almost completely round the bulge to define a tab, an opening in the panel, and a hinge connecting the tab to the panel, displacing the tab rim below the opening, and reforming the tab to cause it to underlie the panel while holding the tab against displacement relative to the panel in the plane of the panel, whereby to produce a uniform underlap. Fig. 6 shows the bulge/tab BB after two stages of forming and after cutting by dies 84, 81 to leave hinge 24. Reforming dies 84, 88, Fig. 8, then flatten the bulge, and coin the tab at 90, meanwhile holding the tab, to produce uniform underlap at 36, 42. In the embodiment of Fig. 11, shown after cutting, the bulge is reformed by ironing out of a shoulder 165, preferably also with some coining.

0) US4681238A – RE–CLOSURE DEVICE FOR POP TOP CONTAINERS

140) Family number: 5332066 (US4681238A) © PatBase

Title: Re–closure device for pop top containers

Priority: US19860914829 19861003

Family:

Publication number	Publication date	Application number	Application date
US4681238 A	19870721	US19860914829	19861003

Probable Assignee: SANCHEZ RUBEN G

Assignee(s):(std)**:** SANCHEZ RUBEN G

Inventor(s):(std)**:** SANCHEZ RUBEN G

International class (IPC 8–9)**:** B65D17/50 B65D41/02 (Advanced/Invention); B65D17/00 B65D41/02 (Core/Invention)

International class (IPC 1–7)**:** B65D17/50 B65D41/02

CPC: B65D17/166

European class: B65D17/16B2B

US class: 220/260 220/263 220/270 220/336 220/821

Classification Explorer

Cited documents: US4463866 A, US4442950 A, US4410101 A, US4136797 A,

Forward Citations: WO14044606, WO12049280, WO11124552, WO06009483, WO05056400, WO0114218, USD747649, USD747199, USD671834, USD559680, US9463910, US9457930, US9371152, US9073655, US8931660, US8931656, US8857644, US8833585, US8727169, US8720717, US8505765, US8336726, US8336725, US8328041, US8313004, US8240498, US8235244, US8215513, US8205477, US7938290, US7918359, US7757889, US7743635, US7735673, US7677404, US7673768, US7506779, US7500577, US7500376, US7380684, US7198168, US7152753, US7100789, US7089825, US6935826, US6889862, US6877941, US6848875, US6763963, US6626314, US6575684, US6408498, US6347720, US6256786, US6220470, US6164480, US6065634, US5810189, US5653355, US5129773, US5080249, US2016059988, US2014353318, US2012292329, US2011233227, US2010294768, US2010133275, US2009179033, US2009173737, US2009026201, US2008302756, US2008272120, US2008110887, US2008078764, US2007262079, US2007145055, US2007131690, US2007068943, US2007007294, US2006163254, US2006042344, US2005284263, US2005247717, US2005115969, US2005051552, US2005006395, US2004056032, US2003202862, US2003173367, RU2559140, GB2342341, GB2342341, GB2331284, GB2331284, GB2326630, GB2307463, GB2307463, GB2258208, GB2258208, CN103946122, CN103946122, CN103328340, CN103328340, CN102917958, CN102917958, AU2011237908,

Abstract:
Source: US4681238A A resealable, anti–litter–type pop top beverage container wherein a rotatable tab member can be raised to depress a sealing member into the interior of the container to fully expose the lid opening for drinking or the like. The sealing member includes a second resealing lobe integral therewith and responsive to the rotation of the tab in a first direction for positioning the resealing tab beneath the lid opening and resealing the opening in an air–tight manner to prevent the escape of gases therefrom thereby preventing the beverage stored therein from going flat. The second or resealing member is also responsive to the rotation of the tab member in the opposite direction for unseating the resealing member and reexposing the lid opening to enable the remaining stored liquid contained therein to be drunk or poured therefrom.

0) US4247014A – SELF–STORING PERMANENTLY ATTACHED OPENING MEANS...

141) Family number: 8065600 (US4247014A) © PatBase

Title: Self–storing permanently attached opening means

Priority: US19780965315 19781201 US19790101882 19791210

Family:

Publication number	Publication date	Application number	Application date
US4247014 A	19810127	US19790101882	19791210

Probable Assignee: WALZ KARL

Assignee(s):(std)**:** WALZ KARL

Inventor(s):(std)**:** WALZ KARL

International class (IPC 8–9)**:** B65D41/32 (Advanced/Invention); B65D41/32 (Core/Invention)

International class (IPC 1–7)**:** B65D41/32

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/269

Classification Explorer

Cited documents: US3923193 A, US3860143 A, US3744667 A,

Forward Citations: WO9838100, US9511411, US7703624, US7165696, US6450359, US6405889, US6234336, US6026971, US5813561, US5248053, US5065882, US4915290, US4480763, US4363419, US2010126994, US2008173646, US2007039961,

Abstract:
Source: US4247014A This invention relates to self–contained self–storing opening means for hollow containers such as thin–walled metal beverage cans customarily provided with attached opening means therefor arranged to be or able to be pulled loose from the can and discarded hazardously underfoot and typically featuring an opening therethrough with a hazardous raw metal edge. This invention provides a can cover including a flap portion and a pull tab, respectively having first and second mating portions mutually fixedly interfitted and permanently interconnected, located either fixedly in the cover or together rotatable with the flap portion inwardly of the can as it is opened, the pull tab having an annular end portion encircling the opening formed by breaking open the flap portion and covering the raw edge of this opening in its final protective position. Accordingly, the present invention is useful on beverage cans and other hollow containers needing non–hazardous permanently attached opening means.

0) US2012168442A – RE–CLOSABLE HYGIENIC ECOLOGY BEVERAGE CONTAINER...

142) Family number: 51417026 (US2012168442A) © PatBase

Title: RE–CLOSABLE HYGIENIC ECOLOGY BEVERAGE CONTAINER END CLOSURE WITH RECIPIENT CONCAVE MEMBER WITH A CELLOPHANE ET AL WRAPPER HERMETICAL PROCESS

Priority: US20110930242 20110103

Family:

Publication number	Publication date	Application number	Application date
US2012168442 AA	20120705	US20110930242	20110103

Probable Assignee: BRADLEY PAMELA D

Assignee(s):(std)**:** BRADLEY PAMELA D

Inventor(s):(std)**:** BRADLEY PAMELA D

International class (IPC 8–9)**:** B65D17/32 B65D43/24 B65D53/00 (Advanced/Invention)

CPC: B65D17/16 B65D2517/0098

European class: B65D17/16 L65D517/00Y9

US class: 220/269 220/831 220/831S 220/849 220/849S

Classification Explorer

Cited documents: US7017769 BA, US5647497 A, US5139163 A, US4815628 A, US4708257 A, US3690509 A,

Forward Citations: US8833587,

Abstract:
Source: US2012168442A A process for the development and improvement of an ecological, hygienic and re–closeable beverage container end closure wherein the non–ingestible and non–inhalable hermetical wrapper and the tab are designed to remain on the beverage container end closure. The new process shall be uniquely coined as “hygienecological”. The process incorporates a cellophane, hermetical wrapper that adheres to the beverage container end closure. The beverage container is partially covered with the wrapper or “crown”. In the cross–sectional view, the crown covers the upper and the immediate anterior surface area of the beverage container. The opener tab member of the circular lid is covered by the configuration of the cellophane hermetical wrapper. Within the inner wall of the unopened beverage container, the convex ledge of the circular lid rests inside the corresponding and underlying concave recipient member. When the tab member is pulled upward the wrapper is broken and the convex ledge of the circular lid releases from the underlying concave recipient member. At the rear of the tabbed lid component, there is a flexible hinge which inherently connects the tabbed lid structured with the convex ledge to the underlying concave recipient member. In the countersink of the beverage container end closure there is a malleable cradle with a recess which is constructed to receive the upper surface of tab member. A gentle finger motion onto the underside of the tabbed lid, secures the tab member of the circular lid into the cradle recess and the circular lid directionally reclines at 180 degrees.

0) WO02085553A1 – METHOD OF MANUFACTURING AN ALUMINUM DESIGN TAB ...

143) Family number: 24116080 (WO02085553A1) © PatBase

Title: METHOD OF MANUFACTURING AN ALUMINUM DESIGN TAB END USING AN INK JET PRINTING FOR A BEVERAGE CAN

Priority: KR20010021330 20010420

Family:

Publication number	Publication date	Application number	Application date
KR20010068084 A	20010713	KR20010021330	20010420
WO02085553 A1	20021031	WO2002KR00725	20020420

Probable Assignee: SOLUTION INC C

Assignee(s):(std)**:** CHUNG HYUNG DONG ; SOLUTION INC C

Assignee(s): C SOLUTION INC

Inventor(s):(std)**:** JUNG HYEONG DONG ; CHUNG HYUNG DONG

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW

International class (IPC 8–9): B21D51/38 (Advanced/Invention); B21D51/38 (Advanced/Non–invention); B21D51/38 (Core/Invention)

International class (IPC 1–7): B21D51/38

CPC: B21D51/383

European class: B21D51/38B

Classification Explorer

Cited documents: US6105806 A, US4380129 A, KR200216365 Y1,

Forward Citations: WO14152858, CN105026169,

Abstract:
The present invention relates to a method for manufacturing a design tab end of a beverage can by using an inkjet printing, in which various designs made by computer graphic or provided on a web site is printed on a tab coil by inkjet printing and then the tab coil is coated with varnish, whereby productivity is improved. The method for manufacturing the tab end comprises the steps of, painting a base color on an exact surface position of an aluminum tab coil which is to be formed to a tab through the tab forming process; printing a computer graphic design on the surface of the tab coil on which the base color has been painted, by using the inkjet printing; coating a varnish for preventing a deterioration of printing quality during forming the distribution of a product, on the surface of the tab coil on which the design has been printed; arranging a pitch of the tab coil so as to determine an exact position of the tab coil which has been coated with the varnish; press–forming the arranged tab coil with a conversion press; and stacking the tab formed by the press–forming to join the tab coil on a center of a shell which has been fed previously.

0) US2004076721A – CONTAINERS WITH PEELABLE CLOSURES THAT CHANGE A...

144) Family number: 30499900 (US2004076721A) © PatBase

Title: CONTAINERS WITH PEELABLE CLOSURES THAT CHANGE APPEARANCE UPON BENDING

Priority: US20020273737 20021018 WO2003CA01577 20031016

Family:

Publication number	Publication date	Application number	Application date
AU2003275820 AA	20040504	AU20030275820	20031016
US2004076721 AA	20040422	US20020273737	20021018
WO04035400 A2	20040429	WO2003CA01577	20031016
WO04035400 A3	20041007	WO2003CA01577	20031016

Probable Assignee: NOVELIS INC

Assignee(s):(std): ROSENFELD ARON M ; GILLEST EDMUND T ; ALCAN INT LTD ; BALL MELVILLE DOUGLAS ; SMITH GARY J

Assignee(s): UBS AG ; UBS STAMFORD BRANCH AG ; ALCAN INT ; ALCAN INTERNATIONAL LIMITED ; BANK OF AMERICA NATIONAL ASSOCIATION ; CITICORP NORTH AMERICA INC ; NOVELIS CORP ; NOVELIS INC ; LASALLE BUSINESS CREDIT LLC ; NOVELIS CAST HOUSE TECHNOLOGY LTD ; NOVELIS NO 1 PARTNERSHIP LTD ; NOVELIS NO1 PARTNERSHIP LTD

Inventor(s):(std): BALL MELVILLE DOUGLAS ; GILLEST EDMUND T ; ROSENFELD ARON M ; SMITH GARY J

Inventor(s): ARON M ROSENFELD ; MELVILLE DOUGLAS BALL ; EDMUND T GILLEST ; GARY J SMITH

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B65D17/50 (Advanced/Invention); B65D17/00 (Core/Invention)

International class (IPC 1–7): A23L1/00 B65D17/50

CPC: B65D17/501 B65D2101/0084 B65D2517/5032 B65D2517/5037 B65D2517/5054

European class: B65D17/50A L65D101/00A6 L65D517/50M10B L65D517/50M99 L65D517/50P1B1

US class: 426/87

Classification Explorer

Cited documents: WO0200512 A1, WO0047487 A1, US5282650 A, US5218472 A, US5135262 A, US5084143 A, US5056659 A, US4915217 A, US4911288 A, US4837061 A, US4652473 A, US4576854 A, US4559729 A, US4557505 A, US4537327 A, US4520924 A, US4471870 A, US4269314 A, US3935960 A, US3923198 A, US3896965 A, US3677774 A, US3389827 A, US2002050493 AA, US15068302, EP0303400 A2,

Forward Citations: WO11156140, US7704073, US2013098950, US2006199139, US2005214709,

Abstract:
Source: US2004076721A A metal can for holding a carbonated or otherwise pressurized beverage or the like, having a rigid metal lid formed with an aperture, and a flexible closure member extending over the aperture and peelably bonded to the lid, the closure member including a portion that undergoes an irreversible change in appearance upon bending and is disposed to be bent by peeling of the closure.

0) US4233331A – METHOD OF SECURING OPENER KEY TO A CONTAINER US...

145) Family number: 1358069 (US4233331A) © PatBase

Title: METHOD OF SECURING OPENER KEY TO A CONTAINER USING ORIENTED POLYPROPYLENE FILM WITH SOLVENTLESS ACRYLIC ADHESIVE

Priority: US19780929489 19780731 US19800113205 19800118

Family:

Publication number	Publication date	Application number	Application date
AU197948736 A1	19800207	AU19790048736	19790706
AU528363 B2	19830428	AU19790048736	19790706
FR2432442 A1	19800229	FR19790019471	19790727
FR2432442 B1	19831125	FR19790019471	19790727
GB2026430 A1	19800206	GB19790020948	19790615
GB2026430 B2	19820616	GB19790020948	19790615
IT7949903 A0	19790731	IT19790049903	19790731
JP1481393 C3	19890210	JP19790094842	19790724
JP55022495 A2	19800218	JP19790094842	19790724
JP63030219 B4	19880616	JP19790094842	19790724
US4233331 A	19801111	US19780929489	19780731
US4309237 A	19820105	US19800113205	19800118

Probable Assignee: AMERICAN NATIONAL CAN CO

Assignee(s):(std): AMERICAN CAN CO

Assignee(s): AMERICAN CAN COMPANY ; AMERICAN CAN CY ; AMERICAN CAN PACKAGING INC ; AMERICAN NATIONAL CAN CO

Inventor(s):(std): LEMKE HAROLD C ; ROHOWETZ STANLEY E ; ROHOWETZ STANLEY EDW ; SUTANREE II ROOUETSUTSU ; HARORUDO SHII REMUKE

Inventor(s): STANLEY EDW ROHOWETZ ; HAROLD C LEMKE ; SUTANREE II ROOETSUTSU

Agent(s): PHILLIPS ORMONDE AND FITZPATRICK

International class (IPC 8–9): B21D51/38 B21D51/44 B65B61/18 B65D17/52 (Advanced/Invention); B65B61/18 (Advanced/Non–invention); B21D51/38 B65B61/18 B65D17/00 (Core/Invention)

International class (IPC 1–7): B21D51/00 B21D51/44 B29C27/20 B32B31/00 B65B55/02 B65B61/18 B65C9/08 B65D17/52

CPC: Y10S428/91 Y10T156/1339 Y10T428/24008 B21D51/383 Y10T156/1773

European class: B21D51/38B

US class: 156/332 156/521 156/568 156/85 156/87 426/131 426/407 428/910 428/99 53/133.3 53/156 53/412 53/425

Classification Explorer

Cited documents: US4181555 A, US3874034 A, US3716433 A, US3565738 A, US3110554 A, US305680 A, US2996177 A, US2921045 A, US2859200 A, US2847340 A, US2532166 A, US2456467 A, US2107311 A, US2027624 A,

Forward Citations: WO9217306, US8353147, US6971219, US6915829, US6808822, US6526725, US6282865, US6127024, US6098369, US5688346, US5190609, US4758300, US4722166, US4647333, US4605459, US4602977, US4584819, US4384915, US4372797, US4351679, US4331434, US4318765, US4317694, US2015111714, US2010061666, US2004167003, US2004123955, US2004007318, US2003134062, US2002098303, JP63300958, JP57055838, EP0271665, AU586922,

Abstract:
Source: US4233331A The present invention pertains to a machine and method of adhering a can opening key to a container and the article formed by such method and machine. More specifically, this invention pertains to the taping of a can opening key to a can body wall by means of a continuous motion high speed machine for applying a polymeric film carrying an adhesive on a surface thereof.

0) US2002117499A – BEVERAGE CAN HAVING A COVERING FOR A DISPENSING...

146) Family number: 28220079 (US2002117499A) © PatBase

Title: Beverage can having a covering for a dispensing opening

Priority: KR20010005073U 20010226

Family:

Publication number	Publication date	Application number	Application date
US2002117499 AA	20020829	US20010028021	20011228

Probable Assignee: HUR KYUNG D

Assignee(s):(std)**:** HUR KYUNG D

Inventor(s):(std)**:** HUR KYUNG D

International class (IPC 8–9)**:** B65D43/18 B65D51/20 (Advanced/Invention); B65D43/14 B65D51/18 (Core/Invention)

International class (IPC 1–7)**:** B65D43/18 B65D51/20

CPC: B65D17/165 B65D2517/0014 B65D2517/0025

European class: B65D17/16B2 L65D517/00Y2C L65D517/00Y3B

US class: 220/254.4 220/258.3 220/821

Classification Explorer

Forward Citations: US8875926, US8622238, US2013240535,

Abstract:
Source: US2002117499A A beverage can is provided with an opening tab rotatably attached to a rotational shaft formed on a can end, and a covering rotatably attached to the rotational shaft, being positioned beneath the opening tab, and adapted to be rotated together with the opening tab, the covering has a size larger than that of a dispensing opening through which contents of the beverage can are dispensed and an upwardly convex shape allowing the covering to be closely contacted to the can end during its rotational movement.

147) Family number: 2038566 (US4405056A) © PatBase

Title: Container closure system with vent opening through the closure tape

Priority: CA19830425517 19830408 US19820378985 19820517

Family:

Publication number	Publication date	Application number	Application date
AU198314560 A1	19831124	AU19830014560	19830516
AU551766 B2	19860508	AU19830014560	19830516
BR8302546 A	19840117	BR19830002546	19830516
CA1200514 A1	19860211	CA19830425517	19830408
DK214283 A	19831118	DK19830002142	19830513
DK214283 A0	19830513	DK19830002142	19830513
EP0094747 A2	19831123	EP19830302269	19830421
EP0094747 A3	19860115	EP19830302269	19830421
JP59026443 A2	19840210	JP19830085662	19830516
KR840004902 A	19841031	KR19830001955	19830507
NO831702 A	19831118	NO19830001702	19830513
PH20307 A	19861119	PH19830028903	19830516
US4405056 A	19830920	US19820378985	19820517
ZA8303490 A	19831228	ZA19830003490	19830516

Probable Assignee: MINNESOTA MINING AND MFG CO A CORP OF DE

Assignee(s):(std)**:** MINNESOTA MINING AND MFG

Assignee(s): MINNESOTA MINING AND MFG CO ; MINNESOTA MINING AND MFG CO A CORP OF DE ; MINNESOTA MINING AND MFG COMP ; PATTERSON RICHARD A ; MINNESOTA MINING AND MANUFACTURING CO ; MINNESOTA MINING AND MANUFACTURING COMP ; MINNESOTA MINING AND MANUFACTURING COMPANY

Inventor(s):(std)**:** ALAN PATTERSON RICHARD ; PATTERSON RICHARD A ; PATTERSON RICHARD A C O MINNES ; PATTERSON RICHARD ALAN ; RICHIYAADO ARAN PATSUTAASON

Inventor(s): PATTERSON RICHARD A C O MINNESOTA MINING AND ; RICHARD ALAN PATTERSON ; RICHARD A PATTERSON

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; SMART AND BIGGAR

Designated states: BE DE FR GB IT NL SE

International class (IPC 8–9)**:** B65D17/50 B65D53/08 (Advanced/Invention); B65D17/00 (Core/Invention)

International class (IPC 1–7)**:** B65D17/50 B65D41/02 B65D53/08 F22B

CPC: B65D17/505 B65D2517/0013 B65D2517/0062 B65D2517/0094 B65D2517/5005 B65D2517/5016 B65D2517/5029 B65D2517/5067 B65D2517/5083 B65D2517/5091

European class: B65D17/50A3 L65D517/00Y2B L65D517/00Y7A1A L65D517/00Y8B L65D517/50M1 L65D517/50M10A1 L65D517/50M7 L65D517/50P6 L65D517/50Q5 L65D517/50Q99

US class: 220/255.1 220/258 220/260 220/271

Classification Explorer

Cited documents: US4165015 A, US4163506 A, US4135637 A, US4108330 A, US3990603 A, US3516852 A, US3441167 A, US3292828 A,

Forward Citations: WO9742088, USRE33893, US8112971, US7837387, US7685793, US6591999, US5894947, US5713481, US5706961, US5688544, US5514442, US5433992, US5012946, US5011037, US5004111, US4976367, US4934544, US4817815, US4781323, US4762246, US2010132309, US2006228057, US2006225787, DE102013104226, DE102013104226, DE102011086121, AU593002,

Abstract:
Source: US4405056A An easy−openable tape closure for a container for gas−containing beverages and comprising an interior tape spanning a pour opening, an exterior tape sealed to the interior tape in the area of the pour opening and having a vent opening in the area of the pour opening. A pull tab is positioned over the exterior tape and sealed therethrough to the interior tape to provide means for rupturing the interior tape at the vent opening to vent the container.

0) US2014237952A – METHOD AND APPARATUS FOR OPENING OF CONTAINERS ...

148) Family number: 57264823 (US2014237952A) © PatBase

Title: METHOD AND APPARATUS FOR OPENING OF CONTAINERS

Priority: US20130780124 20130228

Family:

Publication number	Publication date	Application number	Application date
US2014237952 AA	20140828	US20130780124	20130228

Probable Assignee: FESLER LANCE

Assignee(s):(std)**:** FESLER LANCE

Inventor(s):(std)**:** FESLER LANCE

International class (IPC 8–9)**:** B67B7/12 (Advanced/Invention)

CPC: B67B7/24 B67B7/403 B67B7/16

US class: 53/492 81/3.47

Classification Explorer

Cited documents: USD171415 S1, US8695457 BB, US5212869 A, US4932130 A, US2761210 A, US2014069065 AA, US2012285297 AA, US2008222815 AA, US2005076742 AA, US2004056033 AA, US1812386 A, US1295353 A,

Forward Citations: USD754921, USD753877, US9272891, US9260282, US2016207749, US2015101200, US2014069065,

Abstract:
Source: US2014237952A A method and opener for creating openings in the sidewalls of bead seam containers, such as a pop–top can, to allow air to enter the container when the contents are poured is formed to include a mounting body (140). A seam engagement element (150) sized and shaped to fit the bead seam of a container and a piercing element (152) sufficient to pierce the sidewall of the container are positioned a predetermined distance from each other and in physical association with the mounting body (140) to pierce above the fill level of the container. The bead seam of a container may be inserted into the engagement element (150) creating a fulcrum, then rotated to engage the piercing element (152) to form an opening for air to enter the container when it is poured. These means may be mounted for stationary use (134) or have a handle attached (102) for portability. The portable opener with handle (102) extends a lever body from the mounting body (150) and is operated by placing the engagement element (150) on the bead seam of the container and rotating the handle (106) about the created fulcrum to engage the piercing element (152). These means have been integrated with examples of known bottle openers and tab lifters (20) creating an opener that is capable of lifting pop–top can tabs, opening bottles, and creating openings in the sidewalls of pop–top cans.

0) US4011347A – FOOD PRODUCT CONTAINING CUSHIONING MEANS

149) Family number: 1374979 (US4011347A) © PatBase

Title: FOOD PRODUCT CONTAINING CUSHIONING MEANS

Priority: US19750576525 19750512

Family:

Publication number	Publication date	Application number	Application date
BR7602987 A	19761123	BR19760002987	19760512
CA1060393 A1	19790814	CA19760250670	19760421
DE2620160 A1	19761125	DE19762620160	19760507
DE2620160 B2	19780727	DE19762620160	19760507
DE2620160 C3	19790329	DE19762620160	19760507
FR2310937 A1	19761210	FR19760014139	19760511
FR2310937 B1	19810619	FR19760014139	19760511
GB1555513 A	19791114	GB19760019345	19760511
GB1555514 A	19791114	GB19790004457	19760511
IT1061636 A	19830430	IT19760049313	19760504
JP1236972 C3	19841031	JP19760052306	19760510
JP51137591 A2	19761127	JP19760052306	19760510
JP59012546 B4	19840323	JP19760052306	19760510
US4011347 A	19770308	US19750576525	19750512

Probable Assignee: OWENS ILLINOIS INC

Assignee(s):(std)**:** KL UPFEL KURT WALTER ; OWENS ILLINOIS INC

Assignee(s): OWENS ILLINOIS INC TOLEDO OHIO V ST A ; OTOMEITETSUDO KONTENAA CORP ; OWENS ILLINOIS ; AUTOMATED CONTAINER CORP ; GRIFFITH EDWIN D

Inventor(s):(std)**:** EDOUIN DEIRU GURIFUISU ; GRIFFITH E ; GRIFFITH EDWIN D ; GRIFFITH EDWIN DALE

Inventor(s): GRIFFITH EDWIN DALE PEMBERVILLE OHIO V ST A ; DALE GRIFFITH EDWIN ; EDOIN DEIRU GURIFUISU

International class (IPC 8–9)**:** B65D25/02 B65D25/16 B65D25/26 B65D75/06 B65D77/26 B65D81/02 B65D81/03 B65D81/127 B65D85/36 (Advanced/Invention); B65D25/02 B65D25/14 B65D25/20 B65D75/04 B65D77/24 B65D81/03 B65D81/05 B65D85/30 (Core/Invention)

International class (IPC 1–7)**:** B65B B65D25/02 B65D25/26 B65D61/00 B65D75/06 B65D77/02 B65D77/26 B65D81/02 B65D85/00 B65D85/30 B65D85/36

CPC: B65D25/16 B65D77/26 B65D81/127

European class: B65D25/16 B65D77/26 B65D81/127

US class: 206/521 206/523 426/124

Classification Explorer

Cited documents: US3890762 A, US3853221 A, US3821426 A, US3782621 A, US3752384 A, US3745025 A, US3740238 A, US3516538 A, US3498798 A, US3146112 A, US3018015 A, US2808189 A, US2675319 A, US2458737 A, US1868996 A, US1808136 A, US1042928 A, GB227831 A, FR1001624 A,

Forward Citations: WO0246047, WO0246047, US8061111, US7887253, US7866128, US7104416, US6092717, US5950833, US4175921, US4164588, US4139643, US2011067362, US2010158610, US2007157577, US2002125255, JP60123388, JP2002104372, GB2121764, EP0995688, EP0900749, DE29708933, DE19738343, AT513453,

Abstract:
Source: US4011347A Food cushioning means are provided to cushion and protect a stack of uniformly–shaped units of food product, such as chips, crackers, or cookies, that are shipped in a cylindrical container. A unique, inverted, cup–shaped bottom cushioning member is provided to support and cushion the stack of food product

from the bottom. A sleeve of corrugated foam plastic is utilized to surround and cushion the sides of the stack of food product. In another embodiment, the invention provides an integral bottom and side cushioning member, which comprises a unique corrugated foam sleeve with a pair of tab portions folded inwardly near the bottom of the sleeve to support the stack of food product from the bottom.

0) WO02070165A1 – METHOD OF MAKING A STEEL DESIGN TAB FOR A BEVER...

150) Family number: 23917308 (WO02070165A1) © PatBase

Title: METHOD OF MAKING A STEEL DESIGN TAB FOR A BEVERAGE CAN

Priority: KR20010010986 20010303 WO2001KR00601 20010410

Family:

Publication number	Publication date	Application number	Application date
AU2001248895 AA	20020919	AU20010248895	20010410
KR20010044522 A	20010605	KR20010010986	20010303
WO02070165 A1	20020912	WO2001KR00601	20010410

Probable Assignee: SOLUTION INC C

Assignee(s):(std)**:** CHUNG HYUNG DONG ; SOLUTION INC C

Assignee(s): C SOLUTION INC

Inventor(s):(std)**:** CHUNG HYUNG DONG ; JUNG HYEONG DONG

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

International class (IPC 8–9): B21D51/38 B21D53/00 (Advanced/Invention); B21D51/38 B21D53/00 (Core/Invention)

International class (IPC 1–7): B21D51/38 B21D53/00

CPC: B21D51/383 B65D2517/0053

European class: B21D51/38B L65D517/00Y6B1

Classification Explorer

Cited documents: WO9729019 A2, US5931331 A, US3952912 A,

Abstract:
A method of making a steel design tab with a commercial indicium of a beverage can provided with a cylindrical body containing the beverage, an end seamed with an upper portion of the cylindrical body and having a score line for allowing a portion of the end to be easily torn to free an opening through which the beverage is dispensed out, is provided with a step of painting a steel coil for the tab with a desired color, printing the commercial indicium of characters, images and letters represented with various kinds of colors on the painted surface of the steel coil for the tab, varnishing the printed surface of the steel coil for the tab, performing a pitch–align to ensure that the commercial indicium is located in an exact location within the tab which will be made, forming the pitch–aligned steel coil into a tab by a conversion press, applying a quick–drying paint on a cut cross–section of the steel coil for the tabs as an anticorrosive, stacking the tab on a center of a shell supplied from other place, and applying a quick–drying paint on portions of the tab at which the tab is separated from a skeleton.

0) US4957216A – ANCHOR FOR PLASTIC CAP

151) Family number: 4245670 (US4957216A) © PatBase

Title: Anchor for plastic cap

Priority: US19890338580 19890417

Family:

Publication number	Publication date	Application number	Application date
US4957216 A	19900918	US19890338580	19890417

Probable Assignee: ALUMINUM CO OF AMERICA

Assignee(s):(std)**:** ALUMINUM CO OF AMERICA

Assignee(s): ALUMINUM COMPANY OF AMERICA ; ALUMINUM CO

Inventor(s):(std)**:** LABARGE ROBERT L

International class (IPC 8–9): B65D17/50 B65D55/16 (Advanced/Invention); B65D17/00 B65D55/00 (Core/Invention)

International class (IPC 1–7): B65D55/00

CPC: B65D17/166 B65D17/506

European class: B65D17/16B2B B65D17/50B

US class: 220/379 220/744 220/85CH

Classification Explorer

Cited documents: US4793510 A, US4783985 A, US4685849 A, US4678096 A, US4673099 A, US4648528 A, US4442950 A, US4345696 A, US4339053 A, US4148410 A, US4039101 A, US4024981 A, US3997076 A, US3977341 A, US3946683 A, US3938455 A, US3929251 A, US3912114 A, US3902626 A, US3807597 A, US2033042 A,

Forward Citations: USD747649, USD747199, US8857644, US6571975, US5148935, US5121851, US2010133275,

Abstract:
Source: US4957216A This invention relates to an improved can end construction for beverage cans having a score line defined panel therein for beverage dispensing and, more particularly, to an improved can end construction for releasably positioning a displaceable resealing cap assembly at a predetermined location on a container end closure.

0) US6206222B – RESEALABLE CLOSURE ON SEAMED CAN END

152) Family number: 20666206 (US6206222B) © PatBase

Title: RESEALABLE CLOSURE ON SEAMED CAN END

Priority: US19970057387P 19970828 US20000486484 20000515 WO1998US17843 19980828

Family:

Publication number	Publication date	Application number	Application date
AU199892086 A1	19990316	AU19980092086	19980828
US6206222 BA	20010327	US20000486484	20000515
WO9910242 A1	19990304	WO1998US17843	19980828

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP ; CUDZIK DANIEL F

Inventor(s):(std)**:** CUDZIK DANIEL F ; DANIEL F CUDZIK

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GE GH GM GN GR GW HU ID IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZW

International class (IPC 8–9): B65D1/16 B65D17/44 B65D25/42 B65D51/16 B65D51/22 (Advanced/Invention)

International class (IPC 1–7): B65D17/44

CPC: Y10S220/906 B65D51/222 B65D1/165 B65D17/161 B65D25/42 B65D51/1688 B65D2251/0015 B65D2251/0071

European class: B65D1/16B B65D17/16B B65D25/42 B65D51/16E3 B65D51/22 B65D51/22A1 L65D251/00Y2D L65D251/00Y6A

US class: 220/258 220/258.3 220/278 220/906 222/541.8 222/83.5 413/15 413/22 413/23

Classification Explorer

Cited documents: US5348182 A, US5292025 A, US4911323 A, US3339812 A, IT531817 A, FR87609 E, FR1442319 A,

Forward Citations: WO13018110, WO07054568, WO06119599, WO04024574, USD747649, USD747199, USD745399, USD745398, USD745397, USD745396, USD744833, USD713267, USD712753, USD707569, USD707568, USD684483, USD677585, USD677584, USD675527, USD672663, USD671834, USD670167, USD663622, USD663210, USD661204, USD661203, USD658078, USD656042, USD653563, USD653562, USD653126, USD653125, USD653124, USD653123, USD652742, USD652741, USD652740, USD651527, USD651526, USD649887, USD641261, USD639164, USD638708, USD638311, USD632190, USD632189, USD632188, USD632187, USD631759, USD626015, USD625616, USD624438, USD622145, USD621724, USD621723, USD620377, USD620360, USD619459, USD619458, USD619457, USD615877, USD614970, USD614969, USD614049, USD612732, USD607754, USD607727, USD607330, USD607329, USD606406, USD606405, USD606404, USD606403, USD606402, USD601436, USD599678, USD599677, USD596958, USD596957, USD596956, USD596955, USD596505, USD596504, USD596503, USD596502, USD596501, USD596500, USD596048, USD593876, USD588021, USD588020, USD588019, USD588018, USD588017, USD588016, USD587137, USD554000, US9637269, US9493284, US9272819, US9216840, US8985371, US8857644, US8844761, US8720717, US8701887, US8631958, US8517176, US8215513, US8141741, US8016148, US7427005, US7261216, US2015274391, US2014042164, US2010059517, US2010059516, US2010025281, US2010025279, US2009218346, US2009212004, US2009101651, US2008302797, US2008302756, US2008156820, US2008011702, US2004026422, US2004007587, ITVI20110100, EP1686066, DE102005004759,

Abstract:
Source: US6206222B An easy–open, reseable closure assembly for a beverage can (10) comprises a metal lid (12) and two threadedly connected molded plastic closure elements (40, 60) with engageable annular reseal surfaces (46, 76). The lid is scored (30) to define a circular tear panel (28) and a hinge (32). The spout element (40) is attached to the lid (12) with the bottom surface of the cap element (60) directly above and aligned with the

periphery of the tear panel (28). Rotation of the cap element (60) by a user ruptures the tear panel and pivots the tear panel (28) downward about the hinge (32), providing a passage through the spout element (40) for pouring and driking. Initial rupture and rupture propagation of the tear panel (28) is controlled by the spacing of the cap element (60) from the tear panel (28) and their configurations. When the cap element (60) is replaced on the spout (40), reseal surfaces (46, 76) engage.

0) US2012048870A – BEVERAGE CONTAINER END WITH MULTIPLE OPENINGS

153) Family number: 50736459 (US2012048870A) © PatBase

Title: BEVERAGE CONTAINER END WITH MULTIPLE OPENINGS

Priority: US20100402215P 20100826 US20110219052 20110826

Family:

Publication number	Publication date	Application number	Application date
US2012048870 AA	20120301	US20110219052	20110826

Probable Assignee: ELLERBE III HARRY LACOSTE

Assignee(s):(std)**:** ELLERBE III HARRY LACOSTE ; FINCH BRYAN DWIGHT

Inventor(s):(std)**:** ELLERBE III HARRY LACOSTE ; FINCH BRYAN DWIGHT

International class (IPC 8–9)**:** A47G19/22 B65D17/32 (Advanced/Invention)

CPC: B65D17/165 B65D2205/02 B65D2231/022 B65D2517/0014 B65D2517/0049

European class: B65D17/16B2 L65D205/02 L65D231/02A L65D517/00Y2C L65D517/00Y6A

US class: 220/269 220/269S 220/712

Classification Explorer

Cited documents: US6131763 A, US2012199586 AA, US2004144787 AA, US2003213803 AA,

Forward Citations: WO16028860, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, US9446879, US9296529, US9233784, US9181007, US8567158, US2014069924,

Abstract:
Source: US2012048870A A beverage container has a tab member rotatably and pivotally mounted thereon. The tab member can be used to form two separate openings in the can top, and each opening can be used either independently or together. One opening is the main drink opening, and the other opening is designed to receive a straw. While the primary use for the second opening is to receive a straw, the second opening may also serve as a built in vent when the main drink opening is used.

0) EP1182140A1 – FOOD CAN END DECKEL FUER LEBENSMITTELBEHAELTER ...

154) Family number: 16007964 (EP1182140A1) © PatBase

Title: Food can end

Priority: EP20000301829 20000306

Family:

Publication number	Publication date	Application number	Application date
EP1182140 A1	20020227	EP20000301829	20000306

Probable Assignee: CROWN CORK AND SEAL TECH CORP

Assignee(s):(std)**:** CROWN CORK AND SEAL TECH CORP

Assignee(s): CROWN CORK AND SEAL TECHNOLOGIES CORP

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

International class (IPC 8–9): B65D17/40 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/40

CPC: B65D17/163 B65D2517/0016 B65D2517/0082 B65D2517/0089

European class: B65D17/16B1 L65D517/00Y2D L65D517/00Y7D1 L65D517/00Y7Z

Classification Explorer

Cited documents: WO9607593 A1, US4016311 A, US3765561 A, EP0268690 A1,

Forward Citations: EP1577222,

Abstract:
Source: EP1182140A1 An easy open can end (1), for example of the full aperture type with a peripheral score (13) defining a removable portion, has deposits of protective material (17) provided on both sides of the end. The deposits are displaced relative to the score in different directions depending on their location. As a result, debonding of the deposit on opening can be controlled whilst ensuring that a user is protected from injury by the protective material preventing contact with cut edges when the can is opened.

0) US2009001079A – PRODUCT CONTAINER STRAINER

155) Family number: 42769573 (US2009001079A) © PatBase

Title: PRODUCT CONTAINER STRAINER

Priority: US20070934204P 20070611 US20080137404 20080611 US20130796970 20130312 US20140281688 20140519

Family:

Publication number	Publication date	Application number	Application date
US2009001079 AA	20090101	US20080137404	20080611
US2013196042 AA	20130801	US20130796970	20130312
US2014251997 AA	20140911	US20140281688	20140519
US8393490 BB	20130312	US20080137404	20080611
US8727168 BB	20140520	US20130796970	20130312

Probable Assignee: BITTON EDDY

Assignee(s):(std)**:** BITTON EDDY

Inventor(s):(std)**:** BITTON EDDY

Agent(s): CROCKETT AND CROCKETT PC; K DAVID; PAUL J

International class (IPC 8–9): B01D29/00 B65D17/00 B65D17/34 B65D51/00 (Advanced/Invention); B01D29/00 B65D51/00 (Core/Invention)

CPC: B65D2517/0013 B65D2517/0056 B65D2517/0089 B65D17/163 B65D17/165

European class: B65D17/16B1 B65D17/16B2 L65D517/00Y2B L65D517/00Y6Z L65D517/00Y7Z

US class: 210/767 210/767S 220/200 220/270 220/271 426/394

Classification Explorer

Cited documents: US8393490 BB, US5775534 A, US3970212 A, US388024 A, US3804287 A, US3593876 A, US3312368 A, US3292828 A, US2002139800 AA, US2001019058 AA, FR9314498, FR2713209 A1,

Forward Citations: WO16204637, WO14059452, US8727168, US2013196042, US2011226771, US2011123697, ITBO20090579, GB2497061, EP2611698, CN103220915,

Abstract:
Source: US2009001079A A single use packing and dispensing technique includes a filter element as part of the packaging to permit a user to drain the packing fluid while retaining the primary package contents such as pickles, olives, canned vegetables, fruit, canned meats, poultry and fish. A strainer may be incorporated into any suitable aspect of the packaging along with a removable sealing element.

0) US4637260A – CAN END TESTER

156) Family number: 5194159 (US4637260A) © PatBase

Title: Can end tester

Priority: US19850808552 19851213 US19860895589 19860814

Family:

Publication number	Publication date	Application number	Application date
US4637260 A	19870120	US19860895589	19860814

Probable Assignee: REYNOLDS METALS CO

Assignee(s):(std)**:** REYNOLDS METALS CO

Assignee(s): REYNOLDS METALS COMPANY

Inventor(s):(std)**:** GILLIAM EDWARD C ; JACKSON JOHN M ; LAMIE BILLY J

International class (IPC 8–9)**:** B07C5/34 (Advanced/Invention); B07C5/34 (Core/Invention)

International class (IPC 1–7)**:** G01N3/08

CPC: B07C5/34

European class: B07C5/34

US class: 73/826 73/834

Classification Explorer

Cited documents: US4519489 A, US4511044 A, US4497409 A, US4495797 A, US4390098 A, US4315688 A, US4110493 A, US4107541 A, US4044891 A, US4016968 A, US3941070 A, US3700101 A, US3688567 A, US3559471 A, US3415350 A, US3261465 A, US2905318 A, US2803343 A, US2749744 A, US2411991 A, US2321331 A, US1694828 A, JP47000902 A2,

Forward Citations: WO9003563, US5086653, US4850230,

Abstract:
Source: US4637260A An apparatus is disclosed for testing easy–open can ends. The apparatus orients the ends, opens the ends, tests the ends to assure that opening has occurred and separates defective ends which have not successfully opened from acceptable ends.

0) WO9736795A1 – CLOSURE DEVICE FOR BEVERAGE CANS DISPOSITIVO PA...

157) Family number: 10303959 (WO9736795A1) © PatBase

Title: CLOSURE DEVICE FOR BEVERAGE CANS

Priority: ES19960000758 19960329 ES19960002362 19961111 WO1997ES00075 19970321

Family:

Publication number	Publication date	Application number	Application date
AU199722941 A1	19971022	AU19970022941	19970321
ES2133046 AA	19990816	ES19960000758	19960329
ES2133046 BA	20000316	ES19960000758	19960329
ES2134705 AA	19991001	ES19960002362	19961111
ES2134705 BA	20000501	ES19960002362	19961111
WO9736795 A1	19971009	WO1997ES00075	19970321

Probable Assignee: MANUEL FRANCISCO GALLARDO SANC

Assignee(s):(std)**:** FEDERICO PAREDES RODENAS ; GALLARDO SANCHEZ MANUEL F ; GALLARDO SANCHEZ MANUEL FRANCI ; GOMEZ VAZQUEZ MATIAS ; PAREDES RODENAS FEDERICO ; PUIG HERRERA MIGUEL ANGEL ; MANUEL FRANCISCO GALLARDO SANC ; MIGUEL ANGEL PUIG HERRERA ; MATIAS GOMEZ VAZQUEZ

Assignee(s): MANUEL FRANCISCO GALLARDO SANCHEZ ; GALLARDO SANCHEZ MANUEL FRANCISCO

Inventor(s):(std)**:** GALLARDO SANCHEZ MANUEL FCO ; GALLARDO SANCHEZ MANUEL FRANCI ; GOMEZ VAZQUEZ MATIAS ; HERRERA MIGUEL ANGEL PUIG ; PAREDES RODENAS FEDERICO ; PUIG HERRERA MIGUEL ANGEL ; RODENAS FEDERICO PAREDES ; SANCHEZ MANUEL FRANCISCO GALLA ; VAZQUEZ MATIAS GOMEZ ; GALLARDO SANCHEZ MANUEL F ; GALLARDO SANCHEZ MANUEL

Inventor(s): MIGUEL ANGEL PUIG HERRERA ; MATIAS GOMEZ VAZQUEZ ; MANUEL FRANCISCO GALLARDO SANCHEZ ; FEDERICO PAREDES RODENAS ; GALLARDO SANCHEZ MANUEL FRANCISCO

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CH CN CU CZ DE DK EE ES FI FR GB GE GH GR HU IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG US UZ VN

International class (IPC 8–9): B65D17/50 B65D51/00 (Advanced/Invention); B65D17/00 B65D51/00 (Core/Invention)

International class (IPC 1–7): A01K63/06 A47K3/22 B65D17/50 B65D51/00

CPC: B65D17/166

European class: B65D17/16B2B

Classification Explorer

Cited documents: US4576306 A, US4078695 A, JP8244770 A2, FR2728237 A1, EP0558422 A1,

Forward Citations: WO09149846, WO0051906, US8770425, RU2493068, NL2000219, JP2011522751, DE102011010602, CN102066205,

Abstract:
The closure device for beverage cans (1) is usable in cans provided with a die–cut lid (3) and comprises an opening lever (5) which has a ring (6), a small tongue (8) hinged to the ring by means of a hinge (9), and a protuberance (10). The lever (5) is made integral with the upper base (2) of the can (1) by means of a rivet (12) about which it may rotate. It has a plug (13) made of flexible and elastic material comprised of two inseparable parts: the plug itself and means for fixing the plug (13) to the opening lever (5). The closure position of the device is obtained by rotating the opening lever by 180 degres about the fixing rivet, from the can opening position where the ring is in the position opposite to the opening.

0) US2014325943A – BEVERAGE CONTAINER WITH MOUTH OPENING AND VENT ...

158) Family number: 57710197 (US2014325943A) © PatBase

Title: BEVERAGE CONTAINER WITH MOUTH OPENING AND VENT

Priority: US20130874767 20130501

Family:

Publication number	Publication date	Application number	Application date
US2014325943 AA	20141106	US20130874767	20130501

Probable Assignee: FESLER LANCE

Assignee(s):(std)**:** FESLER LANCE

Inventor(s):(std)**:** FESLER LANCE

International class (IPC 8–9)**:** B65D17/00 (Advanced/Invention)

CPC: B65D17/161 B65D17/165 B65D2517/0014 B65D2517/0094

US class: 220/271 53/492

Classification Explorer

Forward Citations: USD762114, US9446879,

Abstract:
Source: US2014325943A A container lid (10) includes a conventional main or pour opening, a vent opening separate from the main opening, and a mechanically attached tab (50) to create the openings. A vent score (40) defines the shape of the vent opening, and a vent panel (38) covers the vent opening. A mouth score (26) defines the shape of the pour opening, and a mouth panel (28) covers the pour opening. The action of creating the main opening using the tab (50) causes a moustache score (46) to break and create a vent opening in the same action. When the tab is returned to its original orientation the vent opening may be further enlarged by engaging a raised section on the vent panel (42) and the tab (50), by engaging a vent depressing means (44) on the tab (50) to the vent panel (38), or a combination of the two.

0) US5351853A – BEVERAGE CAN CLOSURE

159) Family number: 11689517 (US5351853A) © PatBase

Title: Beverage can closure

Priority: US19930123242 19930920

Family:

Publication number	Publication date	Application number	Application date
US5351853 A	19941004	US19930123242	19930920

Probable Assignee: SHOCK JOHN P

Assignee(s):(std)**:** SHOCK JOHN P

Inventor(s):(std)**:** SHOCK JOHN P

International class (IPC 8–9): B65D51/00 (Advanced/Invention); B65D51/00 (Core/Invention)

International class (IPC 1–7): A47G19/22

CPC: B65D51/007

European class: B65D51/00F

US class: 220/258 220/258.2 220/259 220/729 D9/439

Classification Explorer

Cited documents: US5285924 A, US5199591 A, US4842159 A, US3428212 A,

Forward Citations: WO08037821, WO05090174, US8931656, US8833585, US8336726, US8336725, US8240498, US8215513, US7918359, US7735673, US7516866, US7152753, US7025224, US6722518, US6460719, US6290084, US6098830, US6032816, US5813559, US5785199, US2012055925, US2011233227, US2010294768, US2009179033, US2009173737, US2009026201, US2009001092, US2008110887, US2007262079, US2007131690, US2007068943, US2007062951, US2007023441, US2006027588, US2005236411, US2004065662, GB2342917,

Abstract:
Source: US5351853A A resilient, modular closure for selectively sealing an opening in a pry tab beverage can. The closure comprises a handle perpendicularly extending from an integral body. The handle is grasped between the thumb and the forefinger of the user. The body comprises a downwardly–projecting, beveled offset adapted to mate with the can opening, and a notch adapted to wedgably engage the pry tab. The ventral surface of the body comprises a circumferential ridge adapted to contact a top of a beverage can to seal around the opening or to mate with a reinforcement channel surrounding the can opening. Raised guides are defined along the dorsal surface of the notch for captivating the pry tab during installation of the closure. A snap fit yieldably engages the rim of the can when the closure is installed. The snap fit comprises a rim–receptive slot. A stop extends rearwardly from the body to contact an inner surface of the rim, and an "L" shaped jaw extends downwardly from the handle. A horizontal leg of the jaw catches on the lower outer surface of the rim when the closure is forced downwardly and the can rim enters the slot between the horizontal leg and the stop.

0) GB1176029A – IMPROVEMENTS IN EASY–OPENING CONTAINERS.

160) Family number: 25111584 (GB1176029A) © PatBase

Title: Improvements in Easy–Opening Containers.

Priority: US19660545714 19660427

Family:

Publication number	Publication date	Application number	Application date
CH463297 A	19680930	CH19670005934	19670425
GB1176029 A	19700101	GB19670019432	19670427

Probable Assignee: AMERICAN CAN CO

Assignee(s):(std)**:** AMERICAN CAN CO

Assignee(s): AMERICAN CAN COMPANY

Inventor(s):(std)**:** HARLEY EARL SIMMONS ; JOHN WILSON ROUSE

Inventor(s): WILSON ROUSE JOHN ; EARL SIMMONS HARLEY

International class (IPC 8–9): B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/16 B65D17/34

CPC: B65D17/16 B65D17/165

European class: B65D17/16 B65D17/16B2

Classification Explorer

Abstract:
Source: GB1176029A 1,176,029. Opening containers. AMERICAN CAN CO. 27 April, 1967 [27 April, 1966], No. 19432/67. Heading B8D. A container having an end member 10 in which a removable section 20 is defined by a score line 22, is provided with a pull tab 30 having a depression 34 constructed so that, on raising the tab, the tab fulcrums at 48 close to its point of attachment to the end member. The depression 34 may be of part–spherical form, Fig. 6 (not shown). Turned–over edges 38, 40 on the tab may be omitted.

0) DE2456501A1 – KUNSTSTOFFKONSERVENDOSENDECKEL ZUM AUFREISSEN R...

161) Family number: 2368299 (DE2456501A1) © PatBase

Title: KUNSTSTOFFKONSERVENDOSENDECKEL ZUM AUFREISSEN RECLOSABLE PLASTIC LID FOR CANS – HAVING TEAR STRIP SEALING FILM, TEARABLE FILM, PROTECTIVE FILM AND METAL RING

Priority: DE19742456501 19741129

Family:

Publication number	Publication date	Application number	Application date
DE2456501 A1	19760812	DE19742456501	19741129

Probable Assignee: BEHNISCH JUERGEN

Assignee(s):(std)**:** BEHNISCH JUERGEN

Inventor(s):(std)**:** BEHNISCH JUERGEN

International class (IPC 8–9)**:** B65D17/50 (Advanced/Invention); B65D17/00 (Core/Invention)

International class (IPC 1–7)**:** B65D17/24

CPC: B65D17/506

European class: B65D17/50B

Classification Explorer

Abstract:
Source: DE2456501A1 PATENTANSPRUeCHE 1 Kunststoffkonservendosendeckel zum Aufreissen mit Aufreiss lasche, Dichtungsfolie, Reiss– und Schutzfolie sowie Blech ring, urn ein terschliessen wie bei den nerkoemmlichen Kor servendosendeckeln zu gewaehrleisten 2 Kunststoffkonservendosendeckel nach Anspruch 1, dadurch ge kennzeichnet, dass sich an dem aeusseren oberen Rand des Kunsts offkons e rvendo sende ckels eine D ichtungsfolie befindet, um ein einwandfreies –Abdichten des Deckels zu gewaehrleisten 3. Reclosable plastic lid for preserving cans, esp. for foods, is provided with a tear strip a sealing film a tearable film a protective film and a metal ring. The lid provides excellent sealing effect on cans of any size. It is easily opened by removing the tear strip. After removal of he tear strip, the lid can be easily replaced. No sharp edges are prerxent on the can or lid.

0) WO11095318A1 – CONTAINER LID, AND METHOD FOR PRODUCING A CONTA...

162) Family number: 49388867 (WO11095318A1) © PatBase

Title: CONTAINER LID, AND METHOD FOR PRODUCING A CONTAINER LID

Priority: EP20100001042 20100202

Family:

Publication number	Publication date	Application number	Application date
DE502010001928 D1	20130228	DE201050001928T	20100202
EP2354021 A1	20110810	EP20100001042	20100202
EP2354021 B1	20121226	EP20100001042	20100202
WO11095318 A1	20110811	WO2011EP00445	20110201

Probable Assignee: THIELEN KLAUS

Assignee(s):(std)**:** THIELEN KLAUS ; THIELEN WOLFGANG

Inventor(s):(std)**:** THIELEN KLAUS ; THIELEN WOLFGANG

Agent(s): MANITZ FINSTERWALD AND PARTNER GBR

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/28 B65D17/34 (Advanced/Invention)

CPC: B65D47/103

European class: B65D47/10A

Classification Explorer

Cited documents: WO08098558 A1, US6286703 BA, US5242073 A, US2009001081 AA, US2008110887 AA, NL2000219 C2, GB1389351 A, EP1607341 A1, DE9005150 U, DE8911286 U,

DE202005017270 U1

DE19613246 A1,

Forward Citations: WO13153218,

Abstract:
The invention relates to a container lid (1) having a reclosable opening, in particular for drinks containers, having a lid surface (3) made from a first plastic material, an edge section which surrounds the latter, and an opening region (11) which is delimited by a circumferential tear–open notch (4). A lever element is provided for penetrating the tear–open notch, which lever element is connected on one side to a pulling lug (15) and on the other side acts on the opening region of the lid surface and is supported via a bearing which steps up the opening force applied to the pulling lug. The opening region is configured as a closing lid and is connected at its outer edge, adjacent to the tear–open notch, non–positively and/or positively to a collar part (5) made from a second plastic material.

0) WO07071682A1 – CAN BODY WITH A SEALING COMPOUND PLACED ON A ST...

163) Family number: 34605349 (WO07071682A1) © PatBase

Title: CAN BODY WITH A SEALING COMPOUND PLACED ON A STEP OR FLANGE AND METHOD OF FORMING SUCH A CAN BODY

Priority: EP20050112915 20051223

Family:

Publication number	Publication date	Application number	Application date
EP1800770 A1	20070627	EP20050112915	20051223
WO07071682 A1	20070628	WO2006EP69926	20061219

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CLAYDON PAUL ; CROWN PACKAGING TECHNOLOGY INC

Inventor(s):(std)**:** CLAYDON PAUL

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B21D51/46 B65D21/02 B65D8/20 (Advanced/Invention); B21D51/38 B65D21/02 B65D8/04 (Core/Invention)

CPC: B21D51/2615 B21D51/2646 B21D51/2669 B21D51/46 B65D17/502 B65D2517/5008 B65D2517/5029

European class: B21D51/26B B21D51/26C B21D51/26E B21D51/46 B65D17/50A1 L65D517/50M10A1 L65D517/50M2

Classification Explorer

Cited documents: WO9607593 A1, US3616962, US2019376, GB2164015 A1, FR2639561 A1, EP1495980 A1, EP0919482 A1, DE4038870 A1,

Forward Citations: WO16142677, WO14027180, WO13010875, RU2566276, CH709571,

Abstract:
A can body is provided with a shelf or flange (17) onto which pliable material such as a lining compound (12) is deposited in fluid form. A closure (30) is placed onto the shelf (17) whilst the compound (12) is still in its fluid state. The closure (30) thus forms a depression in the compound (12), which then hardens into this shape to fix the closure (30) in position. The can body of the invention is particularly suited to use in the packaging of foods which are then processed in an overpressure retort.

0) EP0648680A1 – EASY–OPENING CLOSURE. LEICHT ZU OEFFNENDER VER...

164) Family number: 10365620 (EP0648680A1) © PatBase

Title: Easy–opening closure.

Priority: GB19930021118 19931013

Family:

Publication number	Publication date	Application number	Application date
EP0648680 A1	19950419	EP19940307478	19941012
GB9321118 A0	19931201	GB19930021118	19931013

Probable Assignee: CARNAUDMETALBOX PLC

Assignee(s):(std)**:** METAL BOX PLC

Assignee(s): CARNAUD METALBOX PLC ; CARNAUDMETALBOX PLC

Inventor(s):(std)**:** FORSKETT PETER STANLEY ; RAMSEY CHRISTOPHER PAUL

Designated states: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE

International class(IPC 1–7)**:** B65D17/34

CPC: B65D17/163

European class: B65D17/16B1

Classification Explorer

Cited documents: US3929252 A, US3868918 A, FR2102290 A1,

Abstract:
Source: EP0648680A1 A closure (10) comprising a ferrous metal easy open food can end has a retention device (40) which engages the rear portion (38) of a ring–pull tab (30). The retention device (40) has a ledge (46) on which the tab sits and a hooked nipple (48) which passes around the inside of the ring–pull. The central panel (20) of the closure is recessed, particularly under the rear portion (38) of the tab, around the retention device (40). During processing of a container to which the closure is fixed, pressure building up inside the container causes the recessed parts (24, 25, 26) to flex outwardly, thus pushing the retention device (40) into further locking engagement with the tab (30). The tab is thus prevented from lifting and/or rotating during the processing procedure.

0) FR1399815A – BOITE DE CONSERVE A OUVERTURE FACILE A BOX OF ...

165) Family number: 21170578 (FR1399815A) © PatBase

Title: BOITE DE CONSERVE A OUVERTURE FACILE A BOX OF CANNED EASY OPENING (Machine translation)

Priority: FR19640974037 19640511

Family:

Publication number	Publication date	Application number	Application date
FR1399815 A	19650521	FR19640974037	19640511

Probable Assignee: CONTINENTAL CAN CO

Assignee(s):(std)**:** CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC

International class(IPC 1–7)**:** B65D17/24

CPC: B65D17/163

European class: B65D17/16B1

Classification Explorer

Abstract:
Source: FR1399815A (Claim 1) 1 vee avec la bande de dechirure de la facon representee sur la figure 13, au lieu de pivoter et de penetrer dans le produit contenu dans le recipient 15, et la partie arrachee de l'extremite 16 du recipient est levee dire (tement en dehors du plan de son pannean d'extremite. Ceci evite l'accumulation du produit contenu dans le recipient 15 sur la partie enlevee de l'extremite 16 de la boite de conserve et par suite evite

Machine translation: (Claim 1) Vee with a tear strip in the manner shown in Figure 13, instead of rotate and penetrate into the product inside the container 15, and the torn part of the extremity 16 of said container is exercised (apart ment plan of its pannean extremity. This avoids the accumulation of the product inside the container 15 of the removed portion of the extremity 16 of the tin can and therefore avoids

0) US2002144913A – BEVERAGE CONTAINER WITH PRIZE DELIVERY RECEPTAC...

166) Family number: 28328659 (US2002144913A) © PatBase

Title: Beverage container with prize delivery receptacle

Priority: US20010828699 20010406

Family:

Publication number	Publication date	Application number	Application date
CL2002000657 A1	20030218	CL20020000657	20020404
US2002144913 AA	20021010	US20010828699	20010406
WO02081329 A1	20021017	WO2002US10401	20020402

Probable Assignee: COCA COLA CO

Assignee(s):(std)**:** ADAMS JOHN E ; BIONDICH SCOTT C ; COCA COLA CO ; FALKENBERG ROBERT J

Assignee(s): THE COCA COLA COMPANY ; COCA COLA CO SOC ESTABLECIDA BAJO LAS LEYES DEL ESTADO DE DELAWARE

Inventor(s):(std)**:** ADAMS JOHN E ; BIONDICH SCOTT C ; FALKENBERG ROBERT J

Inventor(s): ADAMAS JOHN E

Agent(s): VILLASECA

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

International class(IPC 1–7)**:** B65D17/50 B65D25/04 B65D77/00 B65D77/24 B65D81/32

CPC: B65D17/502 B65D77/24 B65D81/3216 B65D2517/0052 B65D2517/5016 B65D2517/5032 B65D2517/5083

European class: B65D17/50A1 B65D77/24 B65D81/32C L65D517/00Y6B L65D517/50M10B L65D517/50M7 L65D517/50Q5

US class: 206/217 220/522

Classification Explorer

Cited documents: WO9911542 A2, WO9624539 A1, US5992677 A, US5799775 A, US4656042 A, US4264007 A, JP2001139062 A2, JP2000270995 A2, GB2331976 A1, FR758309 A, FR2125584 A1,

Forward Citations: WO06060857, US8591976, US8523837, US6766902, US2011248033, US2010094243, US2008308430, US2008149516, US2007026112, US2005178688, US2004211684, JP2008522904, EP3118133,

Abstract:
Source: US2002144913A A product container, for example, a beverage can, for dispensing an in–package prize when the container is opened. The container is sealed by a closure that the consumer peels back to gain access to the contents of the container. The prize, which is contained in a receptacle affixed to the underside of the closure, is revealed when the closure is peeled back. Due to the construction of the prize–delivery container, the container may concurrently hold both a prize and the consumer product.

0) CA1296680A – SELF–CONTAINED COOLING DEVICE FOR FOOD CONTAINE...

167) Family number: 3835404 (CA1296680A) © PatBase

Title: SELF–CONTAINED COOLING DEVICE FOR FOOD CONTAINERS

Priority: CA19870541092 19870702

Family:

Publication number	Publication date	Application number	Application date
CA1296680 A1	19920303	CA19870541092	19870702

Probable Assignee: HOLCOMB ROBERT R

Assignee(s):(std)**:** HOLCOMB ROBERT R

Assignee(s): SUPERIOR MARKETING RESEARCH CORP ; TOMANIK CLARENCE A

Inventor(s):(std)**:** HOLCOMB ROBERT R

Agent(s): OGILVY RENAULT LLP SENCRL SRL

International class (IPC 8–9): B65D81/18 B65D81/32 (Advanced/Invention); B65D81/18 B65D81/32 (Core/Invention)

International class (IPC 1–7): B65D81/18 B65D81/32

Classification Explorer

Abstract:
Source: CA1296680A A self–contained cooling device for use in a container such as a food container to cool the contents of the container at any desired time includes a reservoir containing pressurized fluid. The reservoir is secured to the inside of the container to form an expansion chamber between the reservoir and the container. A tube communicates with the reservoir and extends into the expansion chamber, the tube normally being closed to prevent escape of pressurized fluid from the reservoir. When it is desired to cool the contents of the container the tube is opened so that pressurized fluid from the reservoir expands into the expansion chamber thereby cooling the expansion chamber, reservoir, and contents of the container. Embodiments of the device shown specifically are adapted to be used with commonly used "poptop" beverage cans and in such instance the tube extends to securement with the tab used to operate the "pop–top" or with a separate tab, and operation of the tab causes opening of the tube in the expansion chamber. The device may be secured to the end of the normal "pop–top" can and the reservoir is generally conical in configuration, so can easily be inserted into the filled beverage can by high speed canning equipment as the end is placed on the can and sealed. A further embodiment of the device is shown specifically adapted for use and resue in an insulated food containter.

0) US3809283A – PROTECTIVE SCORE SHIELD FOR EASY OPENING CONTAI...

168) Family number: 573164 (US3809283A) © PatBase

Title: PROTECTIVE SCORE SHIELD FOR EASY OPENING CONTAINER

Priority: US19690826966 19690522 US19690884114 19691204 US19710151381 19710609 US19720273371 19720720

Family:

Publication number	Publication date	Application number	Application date
AU197240439 A1	19731004	AU19720040439	19720327
AU466867 B2	19751113	AU19720040439	19720327
BR7019193 A0	19730130	BR19700219193	19700521
BR7203524 A0	19730607	BR19720003524	19720531
CA946302 A1	19740430	CA19690062859	19690923
CA946303 A1	19740430	CA19700080770	19700421
CA946304 A1	19740430	CA19710128158	19711119
DE2008181 A1	19701126	DE19702008181	19700221
DE2008181 C2	19821118	DE19702008181	19700221
DE2039095 A1	19710609	DE19702039095	19700806
DE2039095 C2	19850321	DE19702039095	19700806
DE2200802 A1	19721221	DE19722200802	19720108
DK127747 B	19731231	DK19700002610	19700521
FR2043618 A1	19710219	FR19700018717	19700522
FR2043618 B1	19740920	FR19700018717	19700522
GB1280276 A	19720705	GB19700057819	19701204
GB1322140 A	19730704	GB19720026566	19720607
IT956958 A	19731010	IT19720025465	19720609
JP51018872 B4	19760612	JP19700043965	19700522
JP53045751 B4	19781208	JP19720057606	19720609
SE359504 B	19730903	SE19700006974	19700521
SE371160 B	19741111	SE19700014521	19701028
SE371160 C	19750220	SE19700014521	19701028
US3809283 A	19740507	US19720273371	19720720
ZA7002044 A	19711027	ZA19700002044	19700325
ZA7107966 A	19730725	ZA19710007966	19711126

Probable Assignee: CONTINENTAL CAN CO

Assignee(s):(std): CONTINENTAL AND CO INC ; CONTINENTAL CAN CO ; CONTINENTAL GROUP

Assignee(s): THE CONTINENTAL GROUP INC 10017 NEW YORK N Y US ; THE CONTINENTAL GROUP INC NEW YORK N Y US ; KEHE ALFRED W ; CONTINENTAL CAN CO INC ; CONTINENTAL CAN CO INC US ; CONTINENTAL CAN COMPANY INC ; CONTINENTAL CAN CY INC ; CONTINENTAL CAN CY INC US

Inventor(s):(std): KEHE A ; KEHE ALFRED W ; KEHE ALFRED WILLIAM ; W KEHE ALFRED ; WKEHE A ; KEHE A W

Inventor(s): KEHE ALFRED WILLIAM BERKELEY ILL ; KEHE ALFRED WILLIAM BERKELEY ILL US ; KEHE ALFRED W BERKELEY ILL US ; KEHE A US ; ALFRED W KEHE ; ALFRED W KEHR ; ALFRED WILLIAM KEHE

International class (IPC 8–9): B65D17/00 B65D17/40 B65D41/32 B65D53/02 (Advanced/Invention); B65D17/00 B65D17/28 B65D41/32 B65D53/00 (Core/Invention); B65D B67B (Subclass/Invention)

International class (IPC 1–7): B65D17/00 B65D17/02 B65D17/16 B65D17/20 B65D17/24 B65D17/40 B65D41/32 B65D53/02

CPC: Y10S220/906 B65D17/163

European class: B65D17/16B1

US class: 220/270 220/378 220/5.4 220/54 220/712 220/906

Classification Explorer

Cited documents: US3744668 A, US3527377 A, US3463348 A, US3447713 A, US3397811 A, US2723778 A, JP51018872 A2, DE2008181 C2, DE1948007 A1,

Forward Citations: WO9212060, WO8707581, US4887732, US4044916, US3894652, US3891116, US3883035, JP54036667, FR2327151, EP2189380, EP0268690, DE2039095, AU597682,

Abstract:
Source: US3809283A This disclosure relates to an easy opening container of the type wherein one end has an easy opening end closure including a removable panel portion defined by a score line. The end closure includes pliable band superimposed over the score line and attached to either one or both of the inner or the outer faces of the end closure. Upon removal of the removable panel portion, the band attached to the inner face provides a protective ledge for the raw metal edge about the opening and the band attached to the outer face provides a protective ledge for the removed panel portion.

0) US3674172A – EASY–OPENING CONTAINERS

169) Family number: 1011832 (US3674172A) © PatBase

Title: EASY–OPENING CONTAINERS

Priority: US19710194895 19711102

Family:

Publication number	Publication date	Application number	Application date
US3674172 A	19720704	US19710194895	19711102

Probable Assignee: SMW ATLANTA INC

Assignee(s):(std)**:** SMW ATLANTA INC

Assignee(s): STROBE CARL J ; WELLS ROBERT A ; WELLS VERA T ; WELLS VERA T DENVER CO

Inventor(s):(std)**:** STROBE CARL J ; WELLS ROBERT A

Inventor(s): CARL J STROBE ; ROBERT A WELLS

International class (IPC 8–9): B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/24 B65D17/34

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/270 220/54 220/712 220/906 D9/438

Classification Explorer

Cited documents: US3473692 A, US3281024 A,

Forward Citations: WO13081638, US9592936, US9533800, US9321562, US4634325, US3949898, US3871548, US3860143, US3850124, RU2541277,

Abstract:
Source: US3674172A Improvements in easy–opening containers of the type frequently referred to as "pop–top" containers used for beverages and other substances. The portion of the easy–opening container which is removed upon opening of the container, and which typically includes a tab of material torn or otherwise removed from the container and a pull ring attached to the tab and having a finger pull therein, is provided with container engagement structure which enables the ring to be secured to the container with the torn–out tab inserted through the opening in the opened container. The finger pull in the ring partially or completely surrounds the opening in the container, thus shielding the sides of the container opening from possible damage to the lips or tongue of a person drinking from the container and also providing a convenient, non–littering technique for disposal of the torn–out portion.

0) US4129227A – ECOLOGY POP–IN CONTAINER TOP

170) Family number: 7193528 (US4129227A) © PatBase

Title: Ecology pop–in container top

Priority: US19780887875 19780317

Family:

Publication number	Publication date	Application number	Application date
US4129227 A	19781212	US19780887875	19780317

Probable Assignee: NEIL THEODORE K O

Assignee(s):(std)**:** NEIL THEODORE K O ; SPECTOR GEORGE

Assignee(s): O NEIL THEODORE K

Inventor(s):(std)**:** O NEIL THEODORE K ; SPECTOR GEORGE

International class (IPC 8–9): B65D41/32 (Advanced/Invention); B65D41/32 (Core/Invention)

International class (IPC 1–7): B65D41/32

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/267 220/277

Classification Explorer

Cited documents: US4018357, US3726432,

Forward Citations: US8469218, US2011062158, US2011031247,

Abstract:
Source: US4129227A An improved beverage can in which a hole is punched in the can top, so to allow drinking from the can, a scored tab of the hole being pushed down into the can and out–of–the–way instead of being torn off and tossed on the ground; the can in one design including a slide having attached "lock–in legs" which, when depressed, break the tab scoring, and when held–down slide is then pushed, it causes the tab to curl up inwardly into the can; and the slide in another design thereof including means to also roll the soft edges downward into the can so to prevent cutting the lips of a drinker.

0) US3875789A – APPARATUS FOR TESTING END CLOSURES

171) Family number: 1132080 (US3875789A) © PatBase

Title: APPARATUS FOR TESTING END CLOSURES

Priority: US19740454835 19740326 US19740454837 19740326

Family:

Publication number	Publication date	Application number	Application date
DE2508004 A1	19751002	DE19752508004	19750225
DE2508047 A1	19751002	DE19752508047	19750225
GB1493121 A	19771123	GB19740039252	19750319
JP1151896 C3	19830630	JP19740136667	19741130
JP50126486 A2	19751004	JP19740136667	19741130
JP57046013 B4	19820930	JP19740136667	19741130
US3875789 A	19750408	US19740454835	19740326
US3875790 A	19750408	US19740454837	19740326

Probable Assignee: AMERICAN NATIONAL CAN CO

Assignee(s):(std)**:** AMERICAN CAN CO

Assignee(s): AMERICAN CAN COMPANY ; AMERICAN CAN PACKAGING INC ; AMERICAN NATIONAL CAN CO

Inventor(s):(std)**:** HERDZINA FRANK J ; HERDZINA FRANK JOHN ; JACOBS EDWARD C ; JACOBS EDWARD CHARLES ; NIGHTINGALE RICHARD P ; NIGHTINGALE RICHARD PAUL ; OROSY JOSEPH J ; OROSY JOSEPH JAMES

Inventor(s): P NIGHTINGALE RICHARD ; J HERDZINA FRANK ; J OROSY JOSEPH ; C JACOBS EDWARD

International class (IPC 8–9)**:** G01M3/04 G01M3/26 G01M3/28 (Advanced/Invention); G01M3/04 G01M3/26 G01M3/28 (Core/Invention)

International class (IPC 1–7)**:** B65B57/00 G01M3/04 G01M3/26 G01M3/28 G01M3/32

CPC: G01M3/2853 G01M3/2869 G01M3/26

European class: G01M3/26 G01M3/28D G01M3/28D4

US class: 73/40 73/400 73/45.2

Classification Explorer

Cited documents: US3499314 A, US2696107 A,

Forward Citations: WO9958946, US8701478, US7810377, US7673491, US6393896, US6351984, US6014891, US5668307, US4440016, US4096736, US3954003, US2013133414, US2009211206, US2009175706, US2009044601, JP58063830, JP55014548, JP3043575, GB2162327, FR2982951, FR2651207, FR2568371, EP1004508, DE4212938, DE19605920, CN105485341, CN103148994, CN102680177, CN102486429, CN102323014,

Abstract:
Source: US3875789A An improved apparatus for testing container end closures for leakage, of the type utilizing a pressurized gas media and including a test chamber comprised of a vertically reciprocable upper chambered member and a fixed lower chambered member, the improvement in the test chamber for testing an end closure placed therein and having a displaceable member sealed thereto by a distensible sealant material, which comprises: means for effecting a separation between the end closure and displaceable member to distend the sealant material and expose it to the pressurized gas to test the sealant material and the seal it provides for leakage, the means for effecting the separation including a springmounted chuck connected to the lower chambered member and having a resisting surface, and, an engaging surface on the upper chambered member for moving end closure downward, while downward movement of the displaceable member is resisted by the chuck resisting surface. 12 Claims, 9 Drawing Figures

0) NL1008675C – BEVERAGE CAN FOR E.G. SOFT DRINKS OR BEER BLIK...

172) Family number: 14640158 (NL1008675C) © PatBase

Title: Beverage can for e.g. soft drinks or beer

Priority: NL19971007002 19970911 NL19981008675 19980323

Family:

Publication number	Publication date	Application number	Application date
NL1008675 C2	19990312	NL19981008675	19980323

Probable Assignee: ADRIANUS ANTONIUS GEERTRUDA VE

Assignee(s):(std)**:** ADRIANUS ANTONIUS GEERTRUDA VE

Assignee(s): VERKENNIS ADRIANUS ANTONIUS GEERTRUDA

Inventor(s):(std)**:** VERKENNIS ADRIANUS ANTONIUS GE ; BONGERS CORNELIS MARGARETHA TH

Inventor(s): CORNELIS MARGARETHA THEODORUS MARIA BONGERS ; ADRIANUS ANTONIUS GEERTRUDA VERKENNIS

International class (IPC 8–9): B65D17/347 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/347

CPC: B65D17/166 B65D2517/0014 B65D2517/0023 B65D2517/0034

European class: B65D17/16B2B L65D517/00Y2C L65D517/00Y3A L65D517/00Y5A1

Classification Explorer

Forward Citations: WO05037665, US9517866, ES2251872, ES2249964, ES2246665,

Abstract:
The bridge part of the ring–pull divides the closure tab into at least two parts which break apart and bend when the lip around the bridge part is bent. A tab (5) formed in one of the end walls (3) of the can (1) is also joined to the end wall by a bridge formed by a relatively thin region of the end wall. A bendable lip is joined to the can end wall close to the tab, a small lip section being on one side of the join, and a large lip section being on the other side. Bending the large lip section in the opposite direction to the can end wall forces the small lip section to be bent in towards the end wall and against the tab, breaking it open.

0) WO12084875A1 – BEVERAGE CAN CONTAINING A SOUND GENERATOR GETR...

173) Family number: 51341563 (WO12084875A1) © PatBase

Title: BEVERAGE CAN CONTAINING A SOUND GENERATOR

Priority: AT20100002103 20101221 EP20110799693 20111220 WO2011EP73309 20111220

Family:

Publication number	Publication date	Application number	Application date
DE502011006622 D1	20150521	DE201150006622T	20111220
EP2655216 A1	20131030	EP20110799693	20111220
EP2655216 B1	20150415	EP20110799693	20111220
WO12084875 A1	20120628	WO2011EP73309	20111220

Probable Assignee: HOEFLINGER ANDREAS

Assignee(s):(std)**:** HOEFLINGER ANDREAS

Inventor(s):(std)**:** HOEFLINGER ANDREAS

Agent(s): PUCHBERGER BERGER AND PARTNER; GRABHERR CLAUDIA; GRABHERR CLAUDIA ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/34 B65D81/36 G10K5/00 (Advanced/Invention)

CPC: B65D17/165 B65D81/36 B65D2517/0014 B65D2517/0056 G10K5/00

European class: B65D17/16B2 B65D81/36 G10K5/00 L65D517/00Y2C L65D517/00Y6Z

Classification Explorer

Cited documents: US1852934 A,

DE202005012629 U1

Abstract:
The invention relates to a musical instrument made of a beverage can comprising an opener (1), which is riveted to the upper top surface (2) of the can (3) and by means of which, by lifting one of the ends (4) thereof, the can (3) can be opened via a pivoting movement of the opener (1) about an axis transversely to the longitudinal axis of the rivet in that the other end (6) pushes a predetermined section (7) of the top surface (2) out of the top surface (2) and bends said section into the can (3), wherein the opener (1) comprises a sound generator (8). According to the invention, the opener (1) comprising the sound generator (8) projects into the cavity of the can (3) when the can (3) is open so as to influence the sound generation. In order to produce the sound generator, preferably a single flat blank is stamped from a sheet–like material, said blank comprising a section each for a lower wall (9), for an intermediate wall (16), for an upper wall (10), for lateral walls (11 a, 11 b), and for connecting walls (17a, 17b), and said blank being bent and folded corresponding to the sections.

0) US8281979B – CAN DISPENSER FOR A CARTON

174) Family number: 52079513 (US8281979B) © PatBase

Title: CAN DISPENSER FOR A CARTON

Priority: US20090635797 20091211

Family:

Publication number	Publication date	Application number	Application date
US8281979 BA	20121009	US20090635797	20091211

Probable Assignee: PFANSTIEHL JOHN

Assignee(s):(std)**:** PFANSTIEHL JOHN

Inventor(s):(std)**:** PFANSTIEHL JOHN

International class (IPC 8–9)**:** B65D17/28 B65D5/72 (Advanced/Invention)

CPC: B65D5/725

US class: 221/305 229/122.1 229/242

Classification Explorer

Cited documents: US7475777 BB, US7467713 BB, US7000803 BB, US6669083 BB, US6604674 BA, US6578736 BB, US6176419 BA, US6176419 B1, US5878947 A, US5505372 A, US5375702 A, US5368194 A, US5228590 A, US4817866 A, US4577799 A, US4396143 A, US4364509 A, US4216861 A, US3894681 A, US3750930 A, US2299027 A, US2009057384 AA, US2007278120 AA, US2007210144 AA, US2004099558 AA, US2004089671 AA, US2003150759 AA,

Forward Citations: US2012018503,

Abstract:
Source: US8281979B A dispensing carton and method for dispensing beverage cans is disclosed. The carton enables end–users to easily remove cans from the carton without the common problem of additional cans inadvertently falling out. After removing tear outs, the dispenser flap is folded upon itself and then onto the lower panel to keep cans from rolling out. Optional locking tabs can be used to keep the flap folded. Optional thumb grips and added slits can make tear out removal easier and less trouble prone. The new carton uses existing size carton blanks and requires no added components and no added cost for materials or labor. Furthermore, no changes to manufacturing equipment or manufacturing processes in making carton blanks, assembling the cartons, filling the cartons or transporting the filled cartons are needed.

0) US4724384A – APPARATUS AND METHOD FOR DETECTING THE CONDITIO...

175) Family number: 10150840 (US4724384A) © PatBase

Title: Apparatus and method for detecting the condition of completed ends

Priority: US19840628099 19840705 US19870020137 19870225

Family:

Publication number	Publication date	Application number	Application date
US4724384 A	19880209	US19870020137	19870225

Probable Assignee: AMERICAN NATIONAL CAN CO

Assignee(s):(std)**:** AMERICAN NATIONAL CAN CO

Assignee(s): AMERICAN NATIONAL CAN COMPANY

Inventor(s):(std)**:** CASTOVILLY JOSEPH ; SIEVERIN WALTER J

International class (IPC 8–9)**:** G01B7/14 (Advanced/Invention); G01B7/14 (Core/Invention)

International class (IPC 1–7)**:** G01B7/14

CPC: G01B7/107

European class: G01B7/10D

US class: 209/548 209/571 209/597 324/207 324/207.26 324/239

Classification Explorer

Cited documents: US4390098 A, US4267508 A, US3469689 A, US3465878 A, US3411621 A,

Forward Citations: WO07120467, WO07120467, US8757523, US8627960, US8360347, US8360242, US8201692, US8177069, US8158902, US8138437, US7732726, US7674994, US7659486, US7658291, US5226239, US5063682, US5042160, US4906926, US2011147501, US2011024531, US2011017644, US2010224537, US2010126914, US2010126913, US2010051514, US2010013116, US2009250384, US2008257794, US2008257793, US2007262000, US2007187305, US2007187299, EP0394109,

Abstract:
Source: US4724384A Shown is an apparatus for mounting an inductive transducer in position over an intermittently moved belt carrying easy open ends for a beverage container and designed to detect whether or not the tabs for easy opening are provided on the ends. The apparatus is designed to resiliently bias the detection transducer towards the ends with a predetermined gap therebetween such that an electrical signal will result that can be used to evaluate whether a tab is in place. The apparatus includes a camming ramp designed to trigger a limit switch to turn off the system should there be multiple ends positioned below the detector. The detector mounting on a resilient support is designed to back away from any obstruction therebeneath to protect the apparatus during the detection operation. The transducer face is protected by about 1/16 inch of the plastic material. Also shown is a process of monitoring easy open ends in order to determine whether there are tabs on the ends including the steps of positioning the ends below an inductive transducer at a preset position relative to the end, generating an output voltage which corresponds to the distance of the metal mass in the end relative to the inductive transducer and comparing the output of the transducer with a predetermined value to establish whether or not there is indeed a tab on the end.

0) DE19746539A1 – DRINKS CAN PULL–TAB DOSENVERSCHLUSS

176) Family number: 13600165 (DE19746539A1) © PatBase

Title: Drinks can pull–tab

Priority: DE19971038598 19970904 DE19971043056 19970930 DE19971046539 19971022

Family:

Publication number	Publication date	Application number	Application date
DE19746539 A1	19990311	DE19971046539	19971022

Probable Assignee: SCHREIBER HANS

Assignee(s):(std): SCHREIBER HANS

Assignee(s): SCHREIBER HANS DR DR 69469 WEINHEIM DE

Inventor(s):(std): SCHREIBER HANS DR DR

Inventor(s): SCHREIBER HANS DR DR 69469 WEINHEIM DE

International class (IPC 8–9): B65D17/32 B65D17/50 (Advanced/Invention); B65D17/00 B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/32 B65D17/50

CPC: B65D17/165 B65D2517/0043

European class: B65D17/16B2 L65D517/00Y5D2

Classification Explorer

Forward Citations: WO12031994, WO10115911, WO10094793, WO09103817, US9272823, US9162796, US8720740,

Abstract:
Source: DE19746539A1 A drinks can has a pull–ring opening tab with a weak point which fails when the ring is pulled to open the can for consumption. A plastic closure is attached to the pull–ring tab. Following access to the can contents and partial consumption, the closure is folded over the can outlet and push–fitted. An Independent claim is included, describing the lid of the can.

0) WO12064291A1 – DRINK CONTAINER WITH A CONTAINED DRINKING STRAW...

177) Family number: 51110530 (WO12064291A1) © PatBase

Title: DRINK CONTAINER WITH A CONTAINED DRINKING STRAW HAVING A STRAW DELIVERING TONGUE AND A DRINKING STRAW WITH SUCH STRAW DELIVERING TONGUE

Priority: WO2010TH00040 20101108

Family:

Publication number	Publication date	Application number	Application date
TH130212 A	20131211	TH20131002396	20101108
WO12064291 A1	20120518	WO2010TH00040	20101108

Probable Assignee: APITHANAKHUN KWHANCHAI

Assignee(s):(std)**:** APITHANAKHUN KWHANCHAI

Inventor(s):(std)**:** APITHANAKHUN KWHANCHAI

Agent(s): VACHANAVUTTIVONG DARANI

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D77/28 (Advanced/Invention); B65D77/28 (Core/Invention)

CPC: B65D17/165 B65D77/283 B65D2517/0049

European class: B65D17/16B2 B65D77/28C L65D517/00Y6A

Classification Explorer

Cited documents: WO05105603 A1, US88629001, US71128504, US6264057 BA, US58831606, US5172827 A, US4792083 A, EP0078789 A2,

DE102007050000 A1

Abstract:
The present invention disclosed a drink container with a contained drinking straw installed inside the container and a mechanism to retrieve the straw from the inside the container comprising a container, a straw and a straw delivering tongue assembled to the said straw. The straw delivering tongue, or at least a tip portion elasticity and spring action qualities and able to spring and resume its arranged posture after having been subjected to a force. Upon opening of the drink, the tip portion of the straw delivering tongue to protrude at the opening of the container enable the consumer to retrieve the straw from the inside of the container. A straw with the straw delivering tongue is also disclosed.

0) US4932130A – KEY FOR GRIPPING AND PIERCING A BEVERAGE CAN

178) Family number: 3473368 (US4932130A) © PatBase

Title: Key for gripping and piercing a beverage can

Priority: US19880275336 19881123

Family:

Publication number	Publication date	Application number	Application date
US4932130 A	19900612	US19880275336	19881123

Probable Assignee: HOLLANDER JASON E

Assignee(s):(std)**:** HOLLANDER JASON E

Inventor(s):(std)**:** HOLLANDER JASON E

International class (IPC 8–9)**:** B67B7/50 (Advanced/Invention); B67B7/00 (Core/Invention)

International class (IPC 1–7)**:** B67B7/50

CPC: B67B7/24

European class: B67B7/24

US class: 30/450

Classification Explorer

Cited documents: US3305924 A, US2867900 A, US2734204 A, US2707827 A,

Forward Citations: US2014237952,

Abstract:
Source: US4932130A A key for gripping a beverage can end while simultaneously allowing piercing of the can body. The key has a rigid shaft, one end adapted for use as a handle, and a forked construction at the other end defining two arms. The first arm is adapted to pierce a can body as the second arm engages the can rim. The second arm has at its end a rim–gripping formation shaped to grip the can rim and serve as a fulcrum as the handle is rotated causing the first arm to pierce the can and form an opening therein.

0) DE2211154A1 – BLIK MET SCHUIFLIP OP HET

179) Family number: 18292155 (DE2211154A1) © PatBase

Title: BLIK MET SCHUIFLIP OP HET

Priority: BE19710772392 19710909 US19700070768 19700909 US19710150351 19710607

Family:

Publication number	Publication date	Application number	Application date
BE772392 A2	19720117	BE19710772392	19710909
BE784514 A5	19721002	BE19720784514	19720607
DE2143463 A1	19720323	DE19712143463	19710831
DE2211154 A1	19721228	DE19722211154	19720308
ES172277 U	19720201	ES19710172277U	19710909
ES172277 Y	19720901	ES19710172277U	19710909
ES178040 U	19721016	ES19720178040U	19720308
ES178040 Y	19730501	ES19720178040U	19720308
FR2106406 A3	19720505	FR19710032513	19710909
FR2106406 A5	19720505	FR19710032513	19710909
FR2106406 B3	19740510	FR19710032513	19710909
FR2140373 A1	19730119	FR19720008160	19720309
NL7112310 A	19720313	NL19710012310	19710907
NL7203063 A	19721211	NL19720003063	19720308
ZA7101411 A	19711124	ZA19710001411	19710304

Probable Assignee: CROWN CORK AND SEAL CY INC

Assignee(s):(std)**:** CROWN CORK AND SEAL CO ; CROWN CORK AND SEAL CO INC ; CROWN CORK AND SEAL CY INC ; CROWN CORK AND SEAL COMPANY INC ; CROWN CORK SEAL CO INC ; CROWN CORK SEAL COMPANY INC ; CROWN CORK SEAL CY INC

Assignee(s): CROWN CORK SEAL CY INC US ; CROWN CORK AND SEAL CY INC 9300 ASHTON ROAD PHILADELPHIA PENNSYLVANIA V S A ; CROWN CORK AND SEAL CY INC 9300 ASHTON ROAD PHIL

Inventor(s):(std)**:** LUVIANO J ; LUVIANO J J

Inventor(s): J J LUVIANO

International class(IPC 8–9)**:** B65D17/50 B65D47/28 (Advanced/Invention); B65D17/00 B65D47/04 (Core/Invention)

International class(IPC 1–7)**:** B65D17/00 B65D17/06 B65D17/16 B65D41/00 B65D41/12 B65D43/20 B65D47/00 B65D47/26 B65D47/28

CPC: B65D47/286 B65D17/506

European class: B65D17/50B B65D47/28D

Classification Explorer

Forward Citations: WO14003586, WO14003585, US9592928,

Abstract:
Source: DE2211154A1 (Claim 1) P A T E N T A N S P R 0 C H E 1. Behaeltermuendung, insbesondere nach Patent... (Patentaamel– dunr P 21.43.463.9 – cc–2o), g e k e n n z e i c h n e t durch einen MUndungsverschluss mit einem Endwandteil (16, 60), der eine oeffnung (14, 64) sowie einander gegenueber liegende Ansaetze (20, 66) aufweist, die sich gegenueber dem Endwandteil nach aussen bzw.

Machine translation: (Claim 1) P A T E N T A N S P R 0 C H E 1. Container delta, in particular after patent… (Patentaamel dunr P 21.43.463.9 – cc–2o), g e k e n n z e i C h n e t by a mouth catch with a final wall part (16, 60), the one opening (14, 64) as well as opposite lying beginnings (20, 66) exhibits itself each other, in relation to the final wall part outward and/or.

0) WO12156068A1 – RE–CLOSABLE CONTAINER/BEVERAGE CAN WIEDERVERSC...

180) Family number: 52349715 (WO12156068A1) © PatBase

Title: RE–CLOSABLE CONTAINER/BEVERAGE CAN

Priority: DE201110101609 20110514

Family:

Publication number	Publication date	Application number	Application date
DE102011101609 A1	20121115	DE201110101609	20110514
WO12156068 A1	20121122	WO2012EP02059	20120514

Probable Assignee: ACKERMANN

Assignee(s):(std)**:** ACKERMANN BRUNO ; FOLLAND DIETER ; GOETZ HERMANN ; ZIELKE AXEL

Assignee(s): ZIELKE ; ACKERMANN ; GOETZ ; FOLLAND

Inventor(s):(std)**:** ACKERMANN BRUNO ; FOLLAND DIETER ; GOETZ HERMANN ; ZIELKE AXEL

Agent(s): BURKART BILL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D43/18 B65D51/00 B65D51/20 (Advanced/Invention)

CPC: B65D17/165 B65D2251/0025 B65D2251/0071 B65D2517/0014 B65D2517/0041

European class: B65D17/16B2 L65D251/00Y2J L65D251/00Y6A L65D517/00Y2C L65D517/00Y5D1

Classification Explorer

Cited documents: US6739471 BB, EP1265792 B1,

DE102005060835 A1

Forward Citations: GB2514635, DE102012213094,

Abstract:
The invention relates to a re–closable container having a container lid (2) that can be broken open and a lid rotary closure (3), which is designed to tear the discharge opening (40) open and to re–close the discharge opening (40). The container lid (2) and the lid rotary closure are supported via a coupling device (5, 6) during the breaking–open operation.

0) EP0941830A1 – DEVICE FOR POSTITIONING PROGESSIVELY FORMING CA...

181) Family number: 12891404 (EP0941830A1) © PatBase

Title: DEVICE FOR POSTITIONING PROGESSIVELY FORMING CAN ENDS ON A FORMING APPARATUS

Priority: EP19980104165 19980310

Family:

Publication number	Publication date	Application number	Application date
EP0941830 A1	19990915	EP19980104165	19980310

Probable Assignee: BATTAGLIA BERGOMI CLAUDIA

Assignee(s):(std)**:** BATTAGLIA BERGOMI CLAUDIA

Inventor(s):(std)**:** DEL GAUDIO GENNARO ; GIULIO PICONE ; GUARINO RENATO

Designated states: AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

International class (IPC 8–9): B21D51/38 (Advanced/Invention); B21D51/38 (Core/Invention)

International class (IPC 1–7): B21D51/38 B30B1/00

CPC: B21D51/383

European class: B21D51/38B

Classification Explorer

Cited documents: WO8906575 A1, US4822232 A, US4723882 A, US4627265 A, US4568230 A, US4026226 A,

Abstract:
Source: EP0941830A1 The stock shells positioning device is put in a conversion press of stock shells (2) into covers. This includes a lower die shoe base (1) substantially horizontal, supporting a plurality of lower pressing stations (3), an upper die shoe base (11), that supports at the bottom a plurality of upper pressing stations (13), a continuous belt (6) for transferring said shells (2) and a plurality of pushers (20), joined to the upper die shoe base (11), acting on said continuous belt (6). The positioning device (30) includes a fixed frame (31), assembled on the lower die shoe base (1), externally to lower pressing stations (3); a set of plates (33), fixed at the top of the frame (31); elastic striker means (35), joined with the lower die shoe base (1) in correspondence of the pushers (20), fit to support the upper branch (6a) of the continuous belt (6), and to slide vertically in phase relationship with the operating of the upper die shoe base (13).

0) DE102010027821A1 – CLOSURE, PARTICULARLY RESEALABLE CLOSURE FOR BE...

182) Family number: 49778350 (DE102010027821A1) © PatBase

Title: CLOSURE, PARTICULARLY RESEALABLE CLOSURE FOR BEVERAGE CAN, HAS CLOSURE FLAP ASSOCIATED WITH FRAMEWORK VIA HINGE, WHERE CLOSURE FLAP IS DESIGNED TO COVER DRINKING HOLE FROM INNER SIDE OF FRAMEWORK DURING CLOSED STATE OF CLOSURE

Priority: DE201010027821 20100415

Family:

Publication number	Publication date	Application number	Application date
DE102010027821 A1	20111020	DE201010027821	20100415

Probable Assignee: BALL PACKAGING EUROPE GMBH

Assignee(s):(std)**:** BALL PACKAGING EUROPE GMBH

Inventor(s):(std)**:** JOEBGES UDO

International class (IPC 8–9)**:** B65D47/20 (Advanced/Invention)

CPC: B65D47/0838 B65D51/007 B65D2251/1083

European class: B65D47/08B4C B65D51/00F L65D251/10H

Classification Explorer

Forward Citations: WO13178793, NL2007748, DE102012209241,

Abstract:
The closure has a framework which is designed to attach to a lid of a beverage can, where the framework has a drinking hole. A closure flap (16) is associated with the framework via a hinge. The closure flap is designed to cover the drinking hole from an inner side of the framework during a closed state of the closure.

0) US2004195240A – RAISED BEVERAGE CAN TOP WITH HOLDING CLIP AND S...

183) Family number: 31031299 (US2004195240A) © PatBase

Title: RAISED BEVERAGE CAN TOP WITH HOLDING CLIP AND SPACER

Priority: US20020058155 20020129

Family:

Publication number	Publication date	Application number	Application date
US2004195240 AA	20041007	US20020058155	20020129

Probable Assignee: BRANDON DARRELL HOLMES

Assignee(s):(std)**:** BRANDON DARRELL HOLMES

Inventor(s):(std)**:** BRANDON DARRELL HOLMES

International class (IPC 8–9)**:** B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7)**:** B65D17/34

CPC: B65D17/165 B65D2517/0016 B65D2517/0056 B65D2517/0082

European class: B65D17/16B2 L65D517/00Y2D L65D517/00Y6Z L65D517/00Y7D1

US class: 220/269 220/906

Classification Explorer

Cited documents: US6202881 BA, US6102242 A, US5813561 A, US5722540 A, US5636753 A, US4728002 A, US4596818 A, US4480763 A, US4014455 A, US3929252 A, US3868918 A, US3780902 A, US3317087 A, US2957601 A,

Forward Citations: USD612747, US9254945, US9162794, US2014054332, US2014008367, US2005051552,

Abstract:
Source: US2004195240A An invention that raises the tops of beverage cans at an angle that makes the drinking process easier, cleaner, more practical and safer (as in the case of drinking a soft drink while driving an automobile) in which one end of the can top that contains the scored oval opening is raised above the rim top of the can in a slanting wedge or circular shape that slants down to the opposite side allowing the can to be raised to a higher degree angle where it does not come in contact with the nose of the person drinking and reduces the angle the head is tipped backward as the drink is being consumed. Also the new top is raised in just the right amount so that it will fit into the concave bottom of an existing can without making contact, thus allowing for the stacking of cans on top of cans in six pack units. For twelve pack or larger packs, the invention includes spacers that allow for stacking packages on top of packages. The invention also includes the addition of a small clip that holds the tab down when snapped back into it's original position by the thumb or finger.

0) US4503990A – DRAWN CAN FOR FOOD AND THE LIKE

184) Family number: 3618523 (US4503990A) © PatBase

Title: Drawn can for food and the like

Priority: CA19850475957 19850307 US19840587099 19840307

Family:

Publication number	Publication date	Application number	Application date
CA1237995 A1	19880614	CA19850475957	19850307
JP1867807 C3	19940826	JP19850011156	19850125
JP5075629 B4	19931020	JP19850011156	19850125
JP60193837 A2	19851002	JP19850011156	19850125
US4503990 A	19850312	US19840587099	19840307

Probable Assignee: BALL CORP

Assignee(s):(std)**:** CONTINENTALPACKAGING CO INC ; CONTINENTALPATSUKEEJINGU CO IN ; CONTINENTAL PACKAGING

Assignee(s): CONTINENTAL PACKAGING CO INC ; CONTINENTAL PACKAGING COMPANY INC ; BALL CORP ; KONCHINENTARU PACKAGING CO INC ; WELLS FARGO BANK NA ; PLASTIC PACKAGING PRODUCTS CO ; NATIONSBANK NA ; KONCHINENTARU PATSUKEEJINGU CO INC ; NATIONSBANK NA AGENT AS ; WELLS FARGO BANK NA AGENT AS ; KUBIS CHARLES S ; WALTER JOHN ; ROTH DONALD J

Inventor(s):(std)**:** CHAARUZU ESU KUUBISU ; CHIYAARUZU ESU KUUBISU ; DONARUDO JEE ROSU ; DONARUDO JIEE ROSU ; JIYON UORUTAA ; JON UORUTAA ; KUBIS CHARLES S ; ROTH DONALD J ; ROTH DONALS J ; WALTER JOHN

Agent(s): OGILVY RENAULT LLP SENCRL SRL

International class (IPC 8–9): B65D17/40 B65D43/02 B65D79/00 (Advanced/Invention); B65D17/28 B65D43/02 B65D79/00 (Core/Invention)

International class (IPC 1–7): B65D17/40

CPC: B65D17/168 B65D43/0274 B65D79/005 B65D2101/0038 B65D2543/00092 B65D2543/00277 B65D2543/00333 B65D2543/0037 B65D2543/00425 B65D2543/00527 B65D2543/00537 B65D2543/00972

European class: B65D17/16C B65D43/02T5E B65D79/00B L65D101/00A3C L65D543/00Y1F2C L65D543/00Y1M4 L65D543/00Y1X L65D543/00Y20B1 L65D543/00Y2F L65D543/00Y4 L65D543/00Y8D1N L65D543/00Y8D3

US class: 220/270 220/276 220/612 220/66 220/67 220/75

Classification Explorer

Cited documents: US4212409 A, US4103802 A, US3465910 A, US220022 A, JP54011235 U1, JP54011235, JP53086258 U1,

Forward Citations: WO05110720, US9414699, US8950630, US7419068, US6196408, US5713484, US4883190, US4712706, US2010294770, US2007240383, US2005247718, US2005006387, JP1182207, EP1744869,

Abstract:
Source: US4503990A This relates to a can, preferrably formed of aluminum, which may be formed by a drawing process and which is so constructed wherein it may utilize wall thicknesses less than those which are presently commercially permissible so as to be suitable for the packaging of food products and the like which are either hot filled or subject to retorting and still commercially compete with three–piece steel cans. A primary feature of the can is the elimination of the customary double seam securing the end unit to the can body and replacing the same with telescoping of portions of the can body and end unit and providing an adhesive bond therebetween with the adhesive bond being enhanced by the reaction of the can body and end unit under conditions of internal pressure and internal vacuum due to the radial compression of the adhesive forming the adhesive bond to increase the shear strength of the adhesive. The end unit is provided with a securing flange which is connected to the end panel by a corner defining a line of weakness wherein the securing flange may be torn from the end panel and at the same time peeled from the can body.

0) US3549042A – BUOYANT BEVERAGE CANS AND THE LIKE

185) Family number: 934373 (US3549042A) © PatBase

Title: BUOYANT BEVERAGE CANS AND THE LIKE

Priority: US19670657321 19670731

Family:

Publication number	Publication date	Application number	Application date
US3549042 A	19701222	US19670657321	19670731

Probable Assignee: SAN MARGALE FARMS

Assignee(s):(std)**:** SAN MARGALE FARMS

Inventor(s):(std)**:** STOLLE DOROTHY J ; STOLLE RALPH J

Inventor(s): DOROTHY J STOLLE ; RALPH J STOLLE

International class (IPC 8–9)**:** B65D25/02 (Advanced/Invention); B65D25/02 (Core/Invention)

International class (IPC 1–7)**:** B65D17/02 B65D25/02 B65D7/22

CPC: B65D17/165 B65D2517/0013 B65D2517/0055 B65D2517/0061

European class: B65D17/16B2 L65D517/00Y2B L65D517/00Y6C L65D517/00Y7A1

US class: 220/212 220/215 220/270 220/54 220/560 220/627

Classification Explorer

Forward Citations: US9073655, US4550850, US4520940, US2013264342, DE3424112,

Abstract:
Source: US3549042A (Claim 1) 1. A beverage can and the like having an end provide with a tear strip and pull,tab therefore, and having a buoyancy element in said end over the area thereof n6t occupied by said tear strip, and _providing sufficient buoyancy, having regard for the weight of isaid can, to cause the can, after opening, to float with at least a portion thereof visible above the water level.

0) US4976367A – EASILY EMPTIED FOOD CAN

186) Family number: 4369703 (US4976367A) © PatBase

Title: Easily emptied food can

Priority: US19890329948 19890329 US19900474208 19900131

Family:

Publication number	Publication date	Application number	Application date
US4976367 A	19901211	US19900474208	19900131

Probable Assignee: HOEFLER RAPHAEL A

Assignee(s):(std)**:** HOEFLER RAPHAEL A

Inventor(s):(std)**:** HOEFLER RAPHAEL A

International class (IPC 8–9)**:** B65D17/50 B65D25/38 (Advanced/Invention); B65D17/00 B65D25/38 (Core/Invention)

International class (IPC 1–7)**:** B65D17/50 B67B7/24

CPC: B65D17/502 B65D25/38 B65D2231/02 B65D2517/0013 B65D2517/0049 B65D2517/0061 B65D2517/0089 B65D2517/0094 B65D2517/5083

European class: B65D17/50A1 B65D25/38 L65D231/02 L65D517/00Y2B L65D517/00Y6A L65D517/00Y7A1 L65D517/00Y7Z L65D517/00Y8B L65D517/50Q5

US class: 220/260 220/270 220/359 220/359.2 220/367 220/600 220/601 220/66 222/1 222/394 426/115 426/131 426/389

Classification Explorer

Cited documents: US4883198 A, US4706849 A, US4412644 A, US4405056 A, US4140241 A, US4135637 A, US4024980 A, US3782609 A, US3692202 A, US3680828 A, US3568875 A, US3172386 A, US1328937 A,

Forward Citations: US5782373, US5722561, US5624295, US5146957, US5123461, US2012085787, US2012085786, US2009200305, US2008149516, US2007259083, US2005029267, FR2841817,

Abstract:
Source: US4976367A A container for food or the like comprises a cylindrical wall enclosed by a top and a bottom lid. The cylindrical wall has a slight angle, thereby being wider at the top lid than at the bottom lid. The bottom lid contains a round vent hole having its lip drawn over in the direction of the interior of the container. An air–tight vent seal tab covers the vent hole. With the top lid removed, the container is inverted so that the bottom lid is facing upward, and then the vent seal tab is removed. A common drinking straw is inserted into the vent hole and is sealed therein by the vent hole lip. Mouth pressure is applied to the drinking straw. This pressure and the force due to gravity, together, force the contents of the container to start to move downward toward the open top lid. As initial motion occurs the contents looses contact with the sidewall of the container because of the slight angle and thereby is easily removed.

0) US3223279A – SNAP–ON CLOSURE ASSEMBLY

187) Family number: 25110203 (US3223279A) © PatBase

Title: SNAP–ON CLOSURE ASSEMBLY

Priority: FR19650015578 19650503 US19640364577 19640504

Family:

Publication number	Publication date	Application number	Application date
AT260100 B	19680212	AT19650004065	19650504
BE663253 A	19650817		19650430
CH428470 A	19670115	CH19650006180	19650504
DE1482519 A1	19690703	DE1965A049098	19650504
DE1482519 B2	19760930	DE1965A049098	19650504
DE1482519 C3	19770428	DE1965A049098	19650504
DK116640 B	19700126	DK19650002238	19650503
FI45263 B	19711231	FI19650001082	19650503
FI45263 C	19720410	FI19650001082	19650503
FR1450519 A	19660624	FR19650015578	19650503
GB1049546 A	19661130	GB19650017850	19650428
MY6700119 A	19671231	MY19670000119	19671231
NL6505664 A	19651105	NL19650005664	19650504
NO122690 B	19710726	NO19650157898	19650430
US3223279 A	19651214	US19640364577	19640504

Probable Assignee: AMERICAN FLANGE AND MFG

Assignee(s):(std)**:** AMERICAN FLANGE AND MANUFACTURING CO INC ; AMERICAN FLANGE AND MANUFACTURING CO INC NEW YORK ; AMERICAN FLANGE AND MFG

Assignee(s): AMERICAN FLANGE AND MFG CO INC ; AMERICAN FLANGE AND MFG COINC

Inventor(s):(std)**:** FRANCIS WHEATON HERBERT ; HERBERT FRANCIS WHEATON ; WHEATON H ; WHEATON HERBERT F

Inventor(s): WHEATON HERBERT FRANCIS

International class (IPC 8–9): B65D41/40 B65D41/42 B65D41/48 B65D41/60 B65D41/62 (Advanced/Invention); B65D41/00 B65D41/32 (Core/Invention)

International class (IPC 1–7): B44C1/28 B65D17/16 B65D41/40 B65D41/60 B65D41/62 B65D51/18 B67B

CPC: B65D17/16 B65D41/40 B65D41/42 B65D41/485 B65D41/60 B65D41/62 B65D2101/0053

European class: B65D17/16 B65D41/40 B65D41/42 B65D41/48B B65D41/60 B65D41/62 L65D101/00A3E

US class: 220/270

Classification Explorer

Cited documents: US575060 A, US3131827 A, FR1117931 A, BE55741 A,

Forward Citations: USD752978, US4520942, US3596790, US3480173, US3355060, FR2563193, ES2249954, EP3002031, DE3514675, AU588804, AT394346,

Abstract:
Source: GB1049546A 1,049,546. Container closures. AMERICAN FLANGE and MANUFACTURING CO. Inc. April 28, 1965 [May 4, 1964], No. 17850/65. Heading B8T. A closure for a can, bottle, jar c. consists of a resilient plastics lid 4, enveloped by a metal sealing cap 5 to which a gripping tab 25 is integrally attached. An edge 15 of the lid 4 snaps over an upwardly diverging rim 2, Fig. 4 (not shown), of the can c. and a sealing member 30, Fig. 7 (not shown), and an anvil 31 compress the metal cap 5 about the rim 2 so that the lid 4 forms a gasket between the metal cap and the rim. A lower portion 32 of the cap skirt 23 is pressed firmly against the can wall. The metal cap 5 is removed by pulling the tab 25, whereupon the cap tears along score lines 27, Fig. 1 (not shown), extending across the top the cap. Access to the can contents is obtained by prising the edge 15 of the.lid 4 over the rim 2. In a modification. Figs. 9, 10 (not shown), the metal sealing cap is in the form of a U–shaped, annulus 35 which clamps the lid 4 about the rim 2. A gripping tab 40 lies flat on the lid 4 in the centre of the annulus, score

lines 42 enabling the annulus to be destructively removed. The closure may be applied to a can with an inwardly or outwardly curled–over rim. In a second modification, Fig. 13, (not shown), the closure is applied to a bottle having a beaded mouth 55. Since the bottle neck is sufficiently rigid, no back–up anvil 31 is needed with the sealing member 30 and so the centre portion of the closure is not recessed.

0) US5108003A – COVER FOR BEVERAGE CAN

188) Family number: 4999625 (US5108003A) © PatBase

Title: Cover for beverage can

Priority: US19910712494 19910610

Family:

Publication number	Publication date	Application number	Application date
US5108003 A	19920428	US19910712494	19910610

Probable Assignee: GRANOFSKY BARRY P

Assignee(s):(std)**:** GRANOFSKY BARRY P

Inventor(s):(std)**:** GRANOFSKY BARRY P

International class (IPC 8–9)**:** B65D17/50 B65D51/18 (Advanced/Invention); B65D17/00 B65D51/18 (Core/Invention)

International class (IPC 1–7)**:** B65D51/20

CPC: B65D17/506 B65D51/185 B65D2251/0031 B65D2251/0071 B65D2517/0098

European class: B65D17/50B B65D51/18B L65D251/00Y2M L65D251/00Y6A L65D517/00Y9

US class: 220/257 220/257.2 220/258.1 220/269 220/711

Classification Explorer

Cited documents: US4927048 A, US4895270 A, US4893725 A, US4520942 A, US4493431 A, US3785519 A, US3690509 A, US3362572 A, US3362563 A, US3335893 A, US3269586 A, US3204805 A,

Forward Citations: WO9838100, WO9705034, WO9700207, WO14128516, WO14128516, WO13178793, WO10065004, WO04078597, WO04078597, WO0228739, WO0063090, USD696593, USD675066, USD672235, USD658980, USD638704, USD637489, USD539285, USD512314, USD454307, US9278506, US8789718, US8708188, US8534490, US8365960, US8167162, US8066141, US7757889, US7152753, US7017769, US6443323, US6338418, US6321927, US6302301, US6015059, US5934495, US5647497, US5301830, US2012228297, US2011100854, US2009223981, US2008047962, US2006138137, US2006060584, US2005282066, US2005218013, US2004256389, US2004099663, US2003121597, GB2294445, FR2850087, ES2187223, EP2757051, EP0840699, EP0807076,

Abstract:
Source: US5108003A A sanitary can cover is provided which extends over the top portion of a beverage can and includes a severable strip along its lower edge which allows the cover to be peeled back so that the can may be opened. Only about half of the cover can be folded away from the end of the can, the remainder of the cover being adhesively secured to the can. The cover may include a plug sealing an opening in the end wall of the can, and a pull tab to assist in removing the plug from the opening.

0) US3781972A – METHOD OF SECURING A PULL RING TO AN EASY OPENI...

189) Family number: 1086416 (US3781972A) © PatBase

Title: METHOD OF SECURING A PULL RING TO AN EASY OPENING CAN END

Priority: FR19700039180 19701030 US19710191731 19711022 US19730323718 19730115

Family:

Publication number	Publication date	Application number	Application date
CA960161 A1	19741231	CA19710126167	19711026
DE2141324 A1	19720504	DE19712141324	19710818
DK158252 B	19900423	DK19710005064	19711018
DK158252 C	19900924	DK19710005064	19711018
FR2112094 A1	19720616	FR19700039180	19701030
FR2112094 B1	19731123	FR19700039180	19701030
GB1325145 A	19730801	GB19710049975	19711027
SE391882 B	19770307	SE19710013424	19711022
SE391882 C	19770616	SE19710013424	19711022
US3781972 A	19740101	US19710191731	19711022
US3826403 A	19740730	US19730323718	19730115

Probable Assignee: CARNAUD AND FORGES

Assignee(s):(std)**:** CARNAUD AND FORGES

Assignee(s): CARNAUD AND FORGES DE BASSE INDRE ETABLISSEMENTS J J ; CARNAUD AND FORGES DE BASSE INDRE J J ; CARNAUD FORGES B INDRE ; CARNAUD FORGES B INDRE FR ; ETABLISSEMENTS J J CARNAUD AND FORGES DE BASSE INDRE ; ETABLISSEMENTS J J CARNAUD AND FORGES DE GASSE INDRE FR ; ETABLISSEMENTS J J CARNAUD AND FORGES DE BASSE INDRE FR ; ENJOLRAS CHRISTIAN ; CARNAUD AND FORGES DE BASSE INDRE J J ETS ; CARNAUD AND FORGES DE BASSE INDRE JJ ; ETABS J J CARNAUD FORGES DE BASSE INDRE ; J J CARNAUD AND FORGES DE BASSE INDRE ; JJ CARNAUD AND FORGES DE BASSE INDRE ETS ; GAUTIER PIERRE ; JJ CARNAUD AND FORGES DE BASSE INDRE ; J J CARNAUD FORGES DE BASSE INDRE ETS ; J J CARNAUD AND FORGES DE GASSE INDRE FR ETS ; BILLY EMILE

Inventor(s):(std)**:** BILLY EMILE ; EMILE BILLY ; ENJOLRAS C ; ENJOLRAS CHARLES ; ENJOLRAS CHRISTIAN ; GAUTIER P ; BILLY E ; GAUTIER PIERRE

Inventor(s): BILLY E FR ; GAUTIER P FR ; ENJOLRAS C FR

International class (IPC 8–9)**:** B21D39/00 B21D39/03 B21D51/38 B21D51/44 B23P11/00 (Advanced/Invention); B21D39/03 B21D51/38 (Core/Invention)

International class (IPC 1–7)**:** B21D22/04 B21D39/00 B21D39/03 B21D51/00 B21D51/44 B21J15/02 B23P11/00 B65D17/20 B65D17/24 B65D47/00

CPC: Y10T29/49915 B65D17/163 B21D51/383

European class: B21D51/38B B65D17/16B1

US class: 220/270 220/272 220/273 220/54 29/50.9 29/509 413/14 D9/438

Classification Explorer

Cited documents: US3637106 A, US3606076 A, US3602980 A, US3557441 A, US3479979 A, US3440713 A, US3361102 A, US3346948 A, US3191564 A,

Forward Citations: WO8902854, US9573724, US7996977, US2011147382, US2006213050, GB2150474, FR2661659, EP2516284,

Abstract:
Source: US3781972A This invention relates to the attachment of a pull tab to an easy opening end for cans and like receptacles by means of a novel rivet formation wherein the head of the rivet is of a thickness substantially approaching the original thickness of the material of the end. The rivet is formed in two punching steps each employing a flat headed punch.

0) US4407424A – PLASTIC PLUG TYPE CLOSURE FOR BEVERAGE CONTAINE...

190) Family number: 2282665 (US4407424A) © PatBase

Title: Plastic plug type closure for beverage containers

Priority: CA19830420262 19830126 US19820394231 19820701

Family:

Publication number	Publication date	Application number	Application date
BE897001 A2	19831209	BE19831010807	19830609
CA1187444 A1	19850521	CA19830420262	19830126
DE3323009 A1	19840105	DE19833323009	19830625
DE3323009 C2	19890824	DE19833323009	19830625
JP1603750 C3	19910422	JP19830114449	19830627
JP2027225 B4	19900615	JP19830114449	19830627
JP59015052 A2	19840126	JP19830114449	19830627
NL8302252 A	19840201	NL19830002252	19830624
US4407424 A	19831004	US19820394231	19820701

Probable Assignee: CONTINENTAL GROUP

Assignee(s):(std): CONTINENTAL GROUP ; CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL GROUP INC ; THE CONTINENTAL GROUP INC ; THE CONTINENTAL GROUP INC STAMFORD CONN US ; THE CONTINENTAL GROUP INC TE STAMFORD CONNECTICUT ; CONTINENTAL GROUP INC THE ; THE CONTINENTAL GROUP INC TE STAMFORD CONNECTICUT VER ST V AM ; HEYN WILLIAM M

Inventor(s):(std): HEYN WILLIAM M ; UIRIAMU EMU HEREN ; MCINTOSH HEYN W

Inventor(s): HEYN WILLIAM M NEW CANAAN CONN US ; M HEYN WILLIAM

Agent(s): SWABEY OGILVY RENAULT

International class (IPC 8–9): B65D17/34 B65D17/50 B65D39/16 (Advanced/Invention); B65D17/00 (Core/Invention)

International class (IPC 1–7): B65D17/34 B65D17/50 B65D39/16 B67B

CPC: B65D17/506

European class: B65D17/50B

US class: 220/260 220/269 220/270 220/354

Classification Explorer

Cited documents: US4232797 A, US4077538 A, US3967749 A, US3235121 A, US3163317 A, DE1256559 B,

Forward Citations: US8695832, US8215513, US7334310, US7137519, US7137519, US6193094, US5462189, US5299604, US5186348, US5145086, US5062542, US4989746, US4981256, US4893725, US4804104, US4747511, US4733793, US4582216, US4580692, US4562936, US4516689, US4463866, US2013020326, US2011011868, US2007080129, US2004140488, US2004112855, EP0444862,

Abstract:
Source: US4407424A A closure for a container wherein the closure is made of plastic and is attached to the container by means of a web and bead, the bead being held captive within a channel which is inscribed within the pour opening and the bead, providing a sharp edge and being arranged in such manner with the pull tab which is adapted to release the closure to concentrate the forces against a sharp cutting edge provided on the channel.

0) WO9220584A1 – TEAR–OFF LID, IN PARTICULAR METALLIC TEAR–OFF L...

191) Family number: 17886104 (WO9220584A1) © PatBase

Title: TEAR–OFF LID, IN PARTICULAR METALLIC TEAR–OFF LID, RECLOSABLE MANY TIMES, FOR EASY–TO–OPEN CONTAINERS

Priority: DE19910006042U 19910513 WO1992DE00407 19920513

Family:

Publication number	Publication date	Application number	Application date
AU199216955 A1	19921230	AU19920016955	19920513
DE9106042 U1	19910912	DE19910006042U	19910513
WO9220584 A1	19921126	WO1992DE00407	19920513

Probable Assignee: PASEWALD ECKHARD

Assignee(s):(std)**:** PASEWALD ECKHARD

Assignee(s): PASEWALD ECKHARD O 1130 BERLIN DE ; ECKHARD PASEWALD

Inventor(s):(std)**:** PASEWALD ECKHARD

Inventor(s): ECKHARD PASEWALD

Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CI CM CS DE DK ES FI FR GA GB GN GR HU IT JP KP KR LK LU MC MG ML MN MR MW NL NO PL RO RU SD SE SN TD TG US

International class (IPC 8–9)**:** B65D17/28 B65D17/32 B65D17/50 B65D41/32 B65D47/36 B65D53/00 B65D8/02 (Advanced/Invention); B65D17/00 B65D17/28 B65D41/32 B65D47/00 B65D53/00 B65D8/00 (Core/Invention)

International class (IPC 1–7)**:** B65D17/28 B65D17/32 B65D47/36 B65D53/00 B65D8/02

CPC: B65D17/166

European class: B65D17/16B2B

Classification Explorer

Cited documents: US4865215 A, US4834258 A, US4717039 A, US4463866 A, EP0078397 A2, DE9005150 U,

Forward Citations: WO09118339, US8469218, DE19750783, DE102011010602, AU2009228812,

Abstract:
A tear–off lid has a gripping loop (6) secured to the lid surface by a rivet located in the axis of the can. By exerting a pressure on a partially scored opening zone (5), an end of the gripping loop (6) presses the opening zone into the inside of the container. To make it possible to close again the opening zone (5), a closure blade arranged between the surface of the lid and the gripping loop (6) and equally secured to the rivet is mechanically linked to the rotatable gripping loop.

0) GB2278335A – RESEALABLE EASY–OPEN CAN

192) Family number: 13098447 (GB2278335A) © PatBase

Title: Resealable easy–open can

Priority: GB19930010645 19930524

Family:

Publication number	Publication date	Application number	Application date
GB2278335 A1	19941130	GB19940010243	19940523
GB9310645 A0	19930707	GB19930010645	19930524
GB9410243 A0	19940713	GB19940010243	19940523

Probable Assignee: SEPEHR FEREIDOON

Assignee(s):(std)**:** SEPEHR FEREIDOON

Assignee(s): FEREIDOON SEPEHR

Inventor(s):(std)**:** SEPEHR FEREIDOON

Inventor(s): FEREIDOON SEPEHR

International class (IPC 8–9)**:** B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7)**:** B65D17/34

CPC: B65D17/166

European class: B65D17/16B2B

Classification Explorer

Cited documents: US5129773, US4673099, GB2255081,

Forward Citations: US8556104, GB2305657,

Abstract:
Source: GB2278335A The ring 2 of a ring–pull can is used when rotated, to seal the opening formed on pulling the ring, a holder 3 (12, Figure 4) formed on the can end holding the ring down to seal the opening. The lower surface of the ring may be coated by a flexible plastics material to provide adequate sealing of the aperture. The can may contain beer or carbonated beverage.

0) GB2347635A – A BOARD GAME

193) Family number: 13505886 (GB2347635A) © PatBase

Title: A board game

Priority: GB19990005294 19990308

Family:

Publication number	Publication date	Application number	Application date
GB200003062 A0	20000329	GB20000003062	20000209
GB2347635 A1	20000913	GB20000003062	20000209
GB9905294 A0	19990428	GB19990005294	19990308

Probable Assignee: SIMISTER MARTIN A

Assignee(s):(std)**:** SIMISTER MARTIN A ; SIMISTER MARTIN ANTHONY

Assignee(s): MARTIN ANTHONY SIMISTER

Inventor(s):(std)**:** SIMISTER MARTIN ANTHONY

Inventor(s): MARTIN ANTHONY SIMISTER

International class (IPC 8–9): A63F3/00 (Advanced/Invention)

International class (IPC 1–7): A63F3/00

CPC: A63F3/00069 A63F3/00072 A63F2003/00362

European class: A63F3/00A6F K63F3/00A6D K63F3/00B5D1

Classification Explorer

Cited documents: US5788234, GB453689, GB2295968, GB2209476, GB2196263, GB2129311, GB1510166, GB1164951,

Abstract:
Source: GB2347635A A board game based upon financial trading in companies comprises 4 interlocking square boards making up one complete playing area on which is shown 2 concentric tracks. The track is divided into segments and players move distinctive tokens along the tracks according to the throw of a pair of dice. Landing on certain segments leads to the drawing of chance cards whose instructions have to be followed; imitation money is used to purchase shares when player tokens land on company segments. Characterising features include the provision of coloured pegs for each player which can be inserted into holes in the company segments in order to indicate which player owns shares in that company, it being possible for more than one player to have shares (and thus pegs) associated with any one company segment. A container, common to all players, Fig 3 (not shown), is divided into areas for holding the coloured pegs for each player (up to a maximum of 8 players) and channels for holding the different categories of chance card; each player has a tray for holding imitation coins and any chance cards in their possession.

0) EP2546159B1 – WIEDERVERSCHLIESSBARER BEHAELTER RESEALABLE CO...

194) Family number: 52789553 (EP2546159B1) © PatBase

Title: WIEDERVERSCHLIESSBARER BEHAELTER RESEALABLE CONTAINER

Priority: EP20110173524 20110712

Family:

Publication number	Publication date	Application number	Application date
DE502011009495 D1	20160602	DE201150009495T	20110712
EP2546159 A1	20130116	EP20110173524	20110712
EP2546159 B1	20160420	EP20110173524	20110712

Probable Assignee: GUTMANN HEIMO

Assignee(s):(std)**:** GUTMANN HEIMO

Inventor(s):(std)**:** GUTMANN HEIMO

Agent(s): WIRNSBERGER GERNOT

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

International class (IPC 8–9)**:** B65D17/00 (Advanced/Invention)

CPC: B65D2517/0014 B65D17/166 B65D2517/0034

Classification Explorer

Cited documents: WO06112613 A1, WO0002785 A1, US6098830 A, US5497896 A, US4749099 A, US4084721 A, US2007145055 AA, NL2000219 C2, GB2426970 A1, GB2331284 A1, EP1688355 A1, EP0078397 A2, DE29804273 U1, DE20119979 U1, DE10156821 A1,

Forward Citations: KR101616917,

Abstract:
The reclosable container comprises a lid (3) with breaking points, and a cover (1) with a tong (1d), with which the lid is pressed in an area between the breaking points by tilting or overturning to deblock an opening (3b). The cover is shifted, such that the deblocked opening (3b) is closed. A small plate with a recess is provided at the lid, where the small plate is connected with a connecting part (2), particularly a rivet and with the lid and is displaced along the recess relative to the lid.

- **search:** SS7 FT="can end" and rotat* and tab (Results 215)
- List: SS7 1–50 (FT="can end" and rotat* and tab) (Results 215)

0) US2002005408A – EASY–OPENING CAN END

1) Family number: 28171374 (US2002005408A) © PatBase

Title: EASY–OPENING CAN END

Priority: JP19970217349 19970812 JP19970246673 19970911 JP19970246674 19970911 JP19970246675 19970911 JP19970246676 19970911 US20020103217 20020320 US19980132624 19980811 JP19980226353 19980810 JP19970360779 19971226 JP19980226354 19980810 JP19970360778 19971226

Family:

Publication number	Publication date	Application number	Application date
DE69833820 D1	20060511	DE19986033820	19980812
DE69833820 T2	20061130	DE19986033820T	19980812
EP0896929 A2	19990217	EP19980115165	19980812
EP0896929 A3	20000329	EP19980115165	19980812
EP0896929 B1	20060315	EP19980115165	19980812
JP11061336 A2	19990305	JP19970217349	19970812
JP11091775 A2	19990406	JP19970246673	19970911
JP11091776 A2	19990406	JP19970246674	19970911
JP11091777 A2	19990406	JP19970246675	19970911
JP11091778 A2	19990406	JP19970246676	19970911
JP11239836 A2	19990907	JP19980226353	19980810
JP11239837 A2	19990907	JP19980226354	19980810
JP3365264 B2	20030108	JP19970217349	19970812
JP3858468 B2	20061213	JP19980226353	19980810
JP3861469 B2	20061220	JP19980226354	19980810
JP3893198 B2	20070314	JP19970246673	19970911
US2002005408 AA	20020117	US19980132624	19980811
US2002170913 AA	20021121	US20020103217	20020320
US6837093 BB	20050104	US20020103217	20020320

Probable Assignee: JFE STEEL CORP

Assignee(s):(std)**:** JFE ENGINEERING CORP ; JFE STEEL CORP ; KAWASAKI STEEL CO ; NIPPON KOKAN KK

Assignee(s): NKK CORP ; SUGIHARA REIKO ; YAMASAKI YUJI ; YOMURA YOSHINORI ; KURIHARA MASAYOSHI ; MIHARA YUTAKA ; FUJIKAKE MASAHISA

Inventor(s):(std)**:** FUJIKAKE MASAHISA ; KURIHARA MASATOSHI ; KURIHARA MASAYOSHI ; MIHARA YUTAKA ; SUGIHARA REIKO ; YAMASAKI YUJI ; YAMAZAKI YUJI ; YOMURA YOSHINORI

Agent(s): FRISHAUF HOLTZ GOODMAN AND CHICK PC

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

International class (IPC 8–9): B21D51/38 B21D51/44 B65D17/00 B65D17/28 B65D17/32 B65D17/34 B65D17/347 B65D17/353 C22C38/00 (Advanced/Invention); B21D51/38 B65D17/00 B65D17/28 C22C38/00 (Core/Invention)

International class (IPC 1–7): B21D51/38 B21D51/44 B65D17/00 B65D17/28 B65D17/32 B65D17/34 B65D17/347 B65D17/353 C22C38/00

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/269 220/906 220/906S 413/16 413/16S 413/17 413/17S 72/379.4

Classification Explorer

Cited documents: US6435368 BA, US5927536 A, US5770290 A, US5497896 A, US5248053 A, US4596342 A, US4504181 A, US435368 A, US4318493 A, US4276993 A, US4130074 A, US4012935

A, US3967753 A, US3964633 A, US3875884 A, US3728980 A, US3688718 A, US2145252 A, JP9108756 A2, JP9099945 A2, JP9099945, JP8224626 A2, JP8099140 A2, JP63040439 A2, JP62235053 A2, JP62142746 A2, JP6115548 A2, JP6115547 A2, JP6115546 A2, JP55010454 B4, JP55010454 A2, JP5040133 A2, JP4014169 B4, JP4014169 A2, JP3071501 B4, JP3071501 A2, JP3071500 B4, JP3071500 A2, JP3057179 B4, JP3057179 A2, JP3005890 B4, JP3005890 A2, JP2179329 A2, EP0542104 A1, DE2126067 A1,

Forward Citations: WO12153675, WO10061961, WO06035514, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD694108, USD691039, US9446879, US9233784, US9079239, US8828569, US8567158, US7871230, US7673491, US7559222, US7552612, US6435368, US2013104619, US2013037542, US2012131848, US2010282706, US2009211206, US2009200306, US2008041855, US2008041853, US2007267423, US2004044562, JP5765391, JP2013249138, JP2010105689, JP2010013168, EP1795278, EP1046589, EP1046589,

Abstract:
Source: US2002005408A An easy−opening can end comprises: an end panel; a score which is formed on the upper surface or the lower surface of the end panel; the score having a cross section of a curved surface; and a tab having a finger grasping portion. The tab is attached to the can end panel and is rotatable around tab−fastening device. The tab−fastening device is positioned offset.

0) US3703979A – CAN END WITH BONDED SEAL SLIDE

2) Family number: 7267081 (US3703979A) © PatBase

Title: CAN END WITH BONDED SEAL SLIDE

Priority: US19700061384 19700805 US19710146945 19710526 US19710221600 19710128 US19720221548 19720128 US19720221571 19720128 US19720214851 19720103 US19720221599 19720128 US19720222070 19720131 US19720221631 19720128

Family:

Publication number	Publication date	Application number	Application date
US3622055 A	19711123	US19700061384	19700805
US3703979 A	19721128	US19720221599	19720128
US3704818 A	19721205		19710128
US3705670 A	19721212		19720128
US3705671 A	19721212		19720128
US3708091 A	19730102	US19710146945	19710526
US3724728 A	19730403	US19720222070	19720131
US3727809 A	19730417	US19720214851	19720103
US3727810 A	19730417	US19720221631	19720128

Probable Assignee: STEEL CORP

Assignee(s):(std)**:** STEEL CORP ; UNITED STATES STEEL CORP

Assignee(s): USX CORP ; STEEL CORP US

Inventor(s):(std)**:** DOUTY D ; DOUTY DONALD L

Inventor(s): DONALD L DOUTY ; DOUTY D US

International class (IPC 8–9): B65D17/32 B65D17/50 B65D47/26 B65D47/28 B65D83/06 (Advanced/Invention); B65D17/00 B65D17/28 B65D47/04 B65D83/06 (Core/Invention)

International class (IPC 1–7): B65D17/16 B65D17/32 B65D47/10

CPC: B65D47/265 B65D47/286 B65D17/16 B65D17/165 B65D17/506 B65D2517/0044

European class: B65D17/16 B65D17/16B2 B65D17/50B B65D47/26D4 B65D47/28D

US class: 220/269 220/270 220/345.1 220/345.4 220/367.1 220/41 220/53 220/821 222/484 222/541 222/541.9 222/557 222/560 222/561 D9/438

Classification Explorer

Cited documents: US3435977 A, US3363798 A, US3308986 A, US3250436 A, US2629534 A, US2313784 A,

Forward Citations: WO14127887, WO12160221, WO12160221, WO12031994, WO0166431, USD733199, USD670415, US9612010, US9512998, US9199763, US9073655, US9016034, US8992212, US8966865, US8931656, US8833585, US8770425, US8733576, US8550813, US8435029, US8336726, US8336725, US8240498, US7918359, US6910598, US6352166, US4627532, US4183443, US4170724, US4136797, US4127212, US4122970, US3977578, US3952911, US3880319, US3856184, US2014008365, US2013320013, US2011308202, US2011240645, US2011097676, US2010294768, US2010116374, US2010104995, US2009220904, US2009179033, US2009173737, US2009068608, US2008110887, US2007262079, US2007068943, US2003155360, JP2011522751, FR2661659, EP0088725, EP0033449, CN103328340, CN103328340, CN103228552, CN103228552,

Abstract:
Source: US3703979A A can end is provided with a pour opening having a pour width. The pour opening is provided with an entry aperture at one end of the pour opening. The entry aperture has a slide width greater than the pour width. The can end has a can end lapping portion and a can end sealing portion adjacent the pour opening and a plane of bulge strength adjacent the entry aperture. A slide is adapted to pass through the entry aperture and has a slide lapping portion and a slide sealing portion. The slide lapping portion is adapted to register with the can end lapping portion, and the slide sealing portion is adapted to register with the plane of bulge strength. A pull tab has a connection to the slide. Engaging means engage the can end lapping portion to press the can end lapping portion into intimate contact with the slide lapping portion and the slide sealing portion

into intimate contact with the plane of bulge strength. A pressure barrier material is employed for sealing the intimately contacting can end sealing portion and the slide lapping portion and also for sealing the intimately contacting plane of bulge strength and the slide sealing portion. The pressure barrier material is bonded to the can end sealing portion with the first predetermined shear strength and to the slide lapping portion and to the plane of bulge strength with a second predetermined shear strength less than the first predetermined shear strength. The pull tab is operable to move the slide lapping portion away from the can end lapping portion to break the bond between the slide lapping portion and the pressure barrier material adjacent the can end sealing portion so that the pressure barrier material adjacent the can end sealing portion now functions as an exit and reclosure slide guide. The pull tab is simultaneously operable to move the slide sealing portion away from such plane of bulge strength to break the bond between the pressure barrier material adjacent the plane of bulge strength and the slide sealing portion so that the pressure barrier material adjacent the plane of bulge strength acts as a guide to uncover the pour opening.

3) Family number: 46628648 (US2012024160A) © PatBase

Title: COFFEE BEAN PACKAGING CARTRIDGE AND COFFEE BEVERAGE SYSTEM INCLUDING SAME

Priority:

AU20100216509	20100217	AU20110216590	20110217	EP20100705202	20100217
CA20162752745	20161209	CA20102752745	20100217	AU20170200772	20170203
EP20110154806	20110217	JP20110551024	20100217	JP20110551024T	20100217
EP20110154896	20110217	EP20110154761	20110217	EP20110154834	20110217
EP20110154887	20110217	EP20130179296	20100217	NL20092002542	20090217
NL20092002719	20090406	NL20092002764	20090417	NL20092003184	20090710
NL20102004274	20100222	NL20102005238	20100817	NL20102005278	20100826
NL20102005280	20100826	NL20112006232	20110217	NL20112006222	20110217
NL20112006237	20110217	NL20112006239	20110217	NL20122009293	20120808
NZ20110601806	20110217	JP20120553832T	20110217	JP20160131081	20160630
WO2010NL50077	20100217	WO2010NL00500	20100217	WO2011NL50108	20110217
WO2011NL50109	20110217	WO2011NL50110	20110217	WO2011NL50114	20110217
WO2011NL50115	20110217	WO2010NZ50077	20100217	US20120587582	20120816
US20140297456	20140605	US20110211117	20110816	US20140333364	20140716
US20120587730	20120816				

Family:

Publication number	Publication date	Application number	Application date
AU2010216509 AA	20100826	AU20100216509	20100217
AU2010216509 BB	20161013	AU20100216509	20100217
AU2011216589 AA	20110825	AU20110216589	20110217
AU2011216589 BB	20170223	AU20110216589	20110217
AU2011216589 BI	20170406	AU20110216589	20110217
AU2011216590 AA	20110825	AU20110216590	20110217
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AU2011216595 BB	20170202	AU20110216595	20110217
AU2011216596 AA	20110825	AU20110216596	20110217
AU2011216596 BB	20170202	AU20110216596	20110217
AU2017200772 AA	20170323	AU20170200772	20170203
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BE1019875 AF	20130205	BE20110000107	20110217
BE1019876 AF	20130205	BE20110000108	20110217
BE1019877 AF	20130205	BE20110000109	20110217
BE1019953 AF	20130305	BE20110000096	20110217
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BRPI1008720 A2	20160308	BR2010PI08720	20100217
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CA2789851 AA	20110825	CA20112789851	20110217
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CN102946772 A	20130227	CN201180019584	20110217	
CN102946772 B	20160810	CN201180019584	20110217	
CN102970906 A	20130313	CN201180019213	20110217	
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CN102970907 B	20170531	CN201180019436	20110217	
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CN102984976 B	20170222	CN201180019442	20110217	
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JP5903052 B2	20160413	JP20120553835T	20110217	
JP5976062 B2	20160823	JP20140189138	20140917	
KR20120004413 A	20120112	KR20117021737	20100217	
KR20130018689 A	20130225	KR20127023935	20110217	
KR20130049173 A	20130513	KR20127023934	20110217	
MX2011008604 A1	20111206	MX20110008604	20100217	
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RU2012139434 A	20140327	RU20120139434	20110217	
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WO11102715 A2	20110825	WO2011NL50109	20110217	
WO11102715 A3	20120216	WO2011NL50109	20110217	
WO11102716 A1	20110825	WO2011NL50110	20110217	
WO11102720 A2	20110825	WO2011NL50114	20110217	
WO11102720 A3	20111208	WO2011NL50114	20110217	
WO11102721 A2	20110825	WO2011NL50115	20110217	
WO11102721 A3	20120216	WO2011NL50115	20110217	

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Assignee(s): SARA LEE DE N V NULL ; SARA LEE DE N V ; KONINKLEJKE FILIPS EHLEKTRONIKS NV ; KONINKLIJKE PHILIPS NV ; KONINKLIJKE DOUWE EGBERTS BV ; PHILIPS ELECTRONICS KONINKLL NV ; KONINKLIJKE PHILIPS ELECTRONIC N V ; KONINKLIJKE PHILIPS ELECTRONICS N V NULL ; PHILIPS ELECTRONIC KONINKLL NV ; KONINKLIJKE DOUWE EGBERTS B V ; DOUWE EGBERTS KONINKLL BV ; KONINKLIJKE PHILIPS ELECTRONICS N V

Inventor(s):(std): CHRISTIAAN JOHANES MATRIA MOORMAN ; CHRISTIAAN JOHANNES MARIA MOORMAN ; CHRISTIAN JOHANES MARIA MOHRMAN ; DE GRAAFF GERBRAND KRISTIAAN ; DE GRAF GERBRAND KRISTIAN ; DILLON CHARL Z KEVIN ; DILLON CHARLES KEVIN ; GERBRAND KRISTIAAN DE GRAAF ; GERBRAND KRISTIAAN DE GRAAFF ; GRAAFF GERBRAND KRISTIAAN ; GRAAFF GERBRAND KRISTIAAN DE ; IVO OS VAN ; IVO VAN OS ; JOB LEONARDUS KNEPPERS ; KNITEL JOZEF TEODOR ; KRISTIAAN DE GRAAFF GERBRAND ; LEONARDUS KNEPPERS JOB ; MOORMAN CHRIS J M ; MOORMAN CHRISTIAAN JOHANES MARIA ; MOORMAN CHRISTIAAN JOHANES MATRIA ; MOORMAN CHRISTIAAN JOHANNES MARIA ; CHARLES KEVIN DILLON ; CHRIS J M MOORMAN ; KNEPPERS JOB LEONARDUS ; KNITEL JOSEPH THEODOOR ; MORMAN KHRISTIAN JOKHANNES MARIJA ; OS IVO ; OS IVO VAN ; PATRICK VERSLUIJS RICHARD ; RICHARD PATRICK VERSLUIJS ; VAN OS IVO ; VERSLUIJS RICHARD PATRICK ; VERSLEJS RIKHARD PATRIK ; MOORMAN KRISTIAN JOKHANNES MARIJA ; DE GRAFF GERBRAND KRISTIAN ; KRISTIAAN GRAAFF GERBRAND ; GRAAF GERBRAND KRISTIAAN

Inventor(s): KNEPPERS JOB LEONARDUS 2635 LC ; VERSLUIJS RICHARD PATRICK 2645 GE ; VAN OS IVO 3811 MB ; KNITEL JOSEPH THEODOOR 3454 KJ ; CHRISTIAAN JOHANES MARIA MOORMAN ; MOORMAN CHRISTIAAN JOHANNES MARIA 5066 MJ ; JOSEPH THEODOOR KNITEL ; DILLON CHARLES KEVIN BOTTISHAM ; DE GRAAFF GERBRAND KRISTIAAN 2182 DN

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; FETHERSTONHAUGH AND CO; JANSEN CORNELIS MARINUS; VO; DURAN LUIS ALFONSO; LAZCANO JESUS; CABINET BEAU DE LOMENIE; OKABE YUZURU; TAKAHASHI SEIICHIRO; OCHI TAKAO; MATSUI TAKAO; MATSUI MITSUO; FOLEY AND LARDNER LLP; HATZMANN M J; JANSEN C M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A23F5/00 A23F5/08 A23F5/26 A23L1/28 A47J31/00 A47J31/057 A47J31/06 A47J31/10 A47J31/34 A47J31/36 A47J31/40 A47J31/42 A47J31/44 A47J31/46 A47J42/40 A47J42/42 A47J42/50 B65B1/04 B65B1/12 B65B3/04 B65D83/04 B65D83/06 B65D85/00 B65D85/804 (Advanced/Invention);
A47J31/36 A47J31/52 B65D85/804 (Advanced/Non–invention);
A47J31/40 A47J31/42 A47J42/00 (Core/Invention)

International class (IPC 1–7): A47J31/40 A47J31/42 A47J42/50

CPC: A23F5/26 B65B1/12 A23F5/262 A47J31/404 A47J31/3614 A47J31/52 B65D85/8043 A47J31/42 A47J31/44 A47J42/00 A47J31/00 A47J31/40 A47J42/50

European class: A47J31/40 A47J31/42 A47J42/50

US class: 1/1 141/1 141/108 141/311R 141/331 141/344 141/386 141/67 241/6 426/115 426/115S 426/231 426/433 426/518 99/280 99/280P 99/285 99/286 99/289R

Classification Explorer

Cited documents: WO9723155 A1, WO9723155, WO9407401 A2, WO200423956, WO10095937 A1, WO09046771 A1, WO09046771, WO04023956 A1, WO0148711 A1, WO0027262 A1, USRE45476 E, US9277838 BB, US9265377 BB, US8950318 BB, US8776671 BB, US8601937 BB, US8439235 BB, US8383180 BB, US8382017 BB, US8047124 BB, US7858135 BB, US7475628 BB, US7461587 BB, US7340991 BB, US7318374 BB, US7240611 BB, US7067168 BA, US7051646 BB, US7032322 BA, US7013796 BB, US6968775 BB, US6962104 BA, US6889599 BB, US6391360 BA, US6339985 BA, US6339985, US6079314 A, US6067894 A, US6067864, US5791526 A, US5632499 A, US5632449 A, US5463934 A, US5406882 A, US5386944 A, US5351604 A, US5338409 A, US5312637 A, US5309820 A, US5267507 A, US5241898 A, US5217108 A, US5193438 A, US5193438, US5094153 A, US4936515 A, US4925150 A, US4876953 A, US4865089 A, US4843956 A, US4791859 A, US4644856 A, US4555984 A, US4476776 A, US4326114 A, US4305328 A, US4271753 A, US3981234 A, US3973623 A, US3921178 A, US3871112 A, US3683790 A, US3490685 A, US3382310 A, US3356097 A, US3313332 A, US3263968 A, US3115097 A, US3036551 A, US3007352 A, US2962220 A, US2930216 A, US2917076 A, US2884269 A, US2856753 A, US2769393 A, US2704468 A, US2610468 A, US2579393 A, US2552167 A, US2296701 A, US2131034 A, US2013115351 AA, US2013101717 AA, US2013095219 AA, US2013095218 AA, US2011073690 AA, US2010308141 AA, US2010080886 AA, US2009165655 AA, US2009155302 AA, US2009145302 AA, US2009127363 AA,

US2008152478 AA, US2008098901 AA, US2007295752 AA, US2007137495 AA, US2007062378 AA, US2006201339 AA, US2006201339, US2005258287 AA, US2005028677 AA, US2005017107 AA, US2004173101 AA, US2004025703 AA, US2003025012 AA, US2002153438 AA, US2002129712 AA, US2002092941 AA, US2002002908 AA, US1981025 A, US1917355 A, US1869720 A, US1769776 A, US1755430 A, US1752006 A, US1604058 A, US1429487 A, US06339985, US05791526, US05632449, US05386944, US05193438, US04936515, US0201339, US0153438, US0145302, US0098901, RU2314739, JP9173213 A2, JP7505328 T2, JP7505328, JP7505323 T2, JP6339433 A2, JP61232176 A2, JP61232176, JP6046437 Y2, JP6046437 A2, JP57194178 U1, JP57194178 U, JP57194178 A2, JP55017956 Y2, JP5317185 A2, JP5161551 A2, JP4025629 U, JP3104362 U, JP3104362 U, JP3104361 U, JP3104361 U, JP2098825 U1, JP2006346061 A2, JP2006346061, JP2005071254 A2, JP2005071254, JP2003518676 T2, JP2003518676, JP2001314325 A2, JP2001314325, JP2001061664 A2, JP2001061664, JP09173213, JP07505328, JP05317185, JP05161551, JP04025629 U, JP02098825 U, GB2447678 A1, FR2565088 A1, EP2403386 B1, EP2403386 A1, EP2067421 A1, EP1826137, EP1700549 A1, EP1440642 A1, EP0804894 A2, EP0766943 A1, EP0605750 A1, EP0543591 A1, EP0452214 A1, EP02067421, EP0182137 A1, DE2926389 A1, DE20300933 U1, DE20300933 U, DE20300933, DE20300928 U1, DE20300928,

DE102007008900 A1

DE102007008898 A1

DE102007008898, DE1020070088, DE02926389, DE000020300928 U, CN2684713 Y, CN2684712 Y, CN2624781 Y, CN2606563 Y, CN201005518 Y, CN201005518 A, CN1830369 A, CN1413340 A, CN1313065 A, CN101268915 A, CN101212921 A,

Forward Citations: WO16113258, WO15180803, WO15104192, WO15078662, WO14185783, WO14184777, WO14045230, WO14045196, WO13057625, WO13057625, WO13048707, WO11102721, USD752910, USD751330, USD750408, USD750407, USD745306, USD745305, USD745304, USD745303, USD743729, USD743198, USD742158, USD741638, US9648982, US9622618, US9510710, US9439390, US9428329, US9428328, US9414710, US9339141, US9277838, US9265377, US9011955, US8944354, US8776671, US8763942, US2016095462, US2016015215, US2015351421, US2015157167, US2015144720, US2015118367, US2014361107, US2014007775, US2013213240, US2013101717, US2013095218, US2012138721, US2011256273, RU2596961, JP5966098, JP5702868, JP5599125, JP2016514978, JP2014533159, JP2014530700, JP2014530684, JP2014506828, JP2014506820, JP2012517879, ITMI20131974, FR3031441, EP3135161, EP3028609, EP2436288, DE202011109913, CN104812278, CN104159480, CN104159480, CN103874440, CN103654464, AU2012324492,

Abstract:
Source: US2012024160A A coffee bean packaging cartridge for holding and supplying multiple servings of coffee beans can be connected to a coffee beverage system. The cartridge includes a container having an outer wall defining an interior volume and an opening at one end thereof. A permanent, preferably non−removable closure member is fitted to the one end of the container and substantially covers the opening. An exit passage in the closure member, defines a coffee bean outlet, for transferring coffee beans from the interior volume. The closure member further has relatively movable closing means for selectively closing the exit passage to reduce exposure of the coffee bean contents to surrounding air. The cartridge further includes connecting means for connecting the cartridge to a coffee beverage system. There is also provided a coffee beverage system that includes the coffee bean packaging cartridge as defined above and at least a dosing device and a grinding mechanism. The dosing device may includes a metering chamber for receiving a portion of coffee beans corresponding to an amount necessary for preparing a single serving of coffee beverage.

4) Family number: 12043332 (US2008267736A) © PatBase

Title: SYSTEM FOR FORMING AND SECURING LIFT–TABS TO CAN ENDS HAVING AN ELONGATED CRANK SHAFT

Priority: US19930014268 19930512 US19960711509 19960910 US20000731547 20001208 US19980221397 19981228 US20040756643 20040113 US20060406561 20060419 US20060406563 20060419 US20060406564 20060419 US20060406576 20060419 US20080070600 20080220 US20080077519 20080320

Family:

Publication number	Publication date	Application number	Application date
US2008267736 AA	20081030	US20080077519	20080320
US5660516 A	19970826	US19930014268	19930512
US6022179 A	20000208	US19960711509	19960910
US6682286 BA	20040127	US20000731547	20001208
US7063492 BA	20060620	US20040756643	20040113
US7234907 BA	20070626	US20060406563	20060419
US7237998 BA	20070703	US20060406561	20060419
US7237999 BA	20070703	US20060406564	20060419
US7344347 BA	20080318	US20060406576	20060419

Probable Assignee: ARTRIP JERRY

Assignee(s):(std)**:** ARTRIP DONALD ; ARTRIP DONALD JASON ; ARTRIP JERRY

Inventor(s):(std)**:** ARTRIP DONALD ; ARTRIP DONALD JASON ; ARTRIP JERRY

Agent(s): JERRY ARTRIP

International class (IPC 8–9): B21D51/38 B21D51/44 (Advanced/Invention); B21D51/38 (Core/Invention)

International class (IPC 1–7): B21D51/44

CPC: B21D51/383 Y10T29/53478 Y10T29/53522

European class: B21D51/38B

US class: 29/809 29/818 413/12 413/14 413/16 413/25 413/54 413/56 413/66 413/66P 413/70 72/405.01 72/424

Classification Explorer

Cited documents: US7344347 BA, US7063492 BA, US6802683 BB, US6802683 BA, US6802683 B1, US6682286 BA, US6022179 A, US5660516 A, US5511920 A, US4932822 A, US4799846 A, US4762579 A, US4723882 A, US4568230 A, US4026226 A, US3231968 A, US1707107 A,

Forward Citations: WO16127263, WO14144284, WO14144284, US9550224, US9393610, US9321097, US7537419, US7344347, US7237999, US7237998, US7234907, US7063492, US7063492, US6926487, US6926456, US6872913, US6802683, US6682286, US6576871, US6533518, US6524048, US6479787, US6476349, US6455806, US6022179, US5887339, US2015314362, US2014271044, US2008267736, US2007292220, US2005039314, US2003178397, US2003053890, JP2016517353, CN105764627, CN105050747,

Abstract:
Source: US2008267736A A system for forming and attaching lift–tabs to can ends to form easy opening lift–tab can ends comprises a first frame, a second frame and a tab press for forming a lift–tab. The system also includes a drive roller adapted to move the strip of metal stock material through the tab press. The system further includes a conversion press for attaching a lift–tab onto a can end, a conveyor, a power source, and an elongated crank shaft operatively connected to the power source. The elongated crank shaft is adapted to transmit power for operating either or both of the tab press and the conversion press.

0) US2011163096A – RE–CLOSABLE CAN END LID WITH A ROTATABLE OPENIN...

5) Family number: 44214133 (US2011163096A) © PatBase

Title: RE–CLOSABLE CAN END LID WITH A ROTATABLE OPENING AND RE–SEALING TAB AND DRINK CAN EQUIPPED WITH THE RE–SEALABLE CAN END LID

Priority: DE200810031667 20080704 EP20080804040 20080911 WO2008EP62075 20080911

Family:

Publication number	Publication date	Application number	Application date
AU2008358819 AA	20100107	AU20080358819	20080911
AU2008358819 BB	20121213	AU20080358819	20080911
BRPI0822918 A2	20150623	BR2008PI22918	20080911
CA2728443 AA	20100107	CA20082728443	20080911
CA2728443 C	20140211	CA20082728443	20080911
CN102123917 A	20110713	CN200880130216	20080911
CN102123917 B	20140430	CN200880130216	20080911
CY1117305 T1	20170426	CY20161100111T	20160210
DE102008031667 A1	20100114	DE200810031667	20080704
DE602008041165 D1	20151224	DE200860041165T	20080911
DK2310281 T3	20160215	DK20080804040T	20080911
EP2310281 A1	20110420	EP20080804040	20080911
EP2310281 B1	20151111	EP20080804040	20080911
EP3009369 A1	20160420	EP20150193367	20080911
ES2562440 T3	20160304	ES20080804040T	20080911
HR20160149 T1	20160311	HR20160000149	20160210
HU026167 T2	20160530	HU20080804040T	20080911
IL210440 A0	20110331	IL20080210440	20080911
IL210440 A1	20150430	IL20080210440	20080911
JP2011526230 T2	20111006	JP20110515133T	20080911
JP5409781 B2	20140205	JP20110515133T	20080911
KR101317061 B1	20131011	KR20117002290	20080911
KR20110036822 A	20110411	KR20117002290	20080911
MX2010014285 A1	20110523	MX20100014285	20080911
NZ590021 A	20120727	NZ20080590021	20080911
PT2310281 T	20160317	PT20080804040T	20080911
RS20110486 A1	20120831	RS20110000486	20080911
RS54107 B1	20151030	RS20110000486	20080911
RU2011102838 A	20120810	RU20110102838	20080911
RU2464211 C1	20121020	RU20110102838	20080911
SA3447 B1	20140617	SA20090300430	20090701
SI2310281 T1	20160331	SI20080031580T	20080911
TH105142 A	20101127	TH20091002952	20090630
TW201028341 A	20100801	TW20090122577	20090703
TWI439396 B	20140601	TW20090122577	20090703
UA101372 C2	20130325	UA20100105967	20080911
US2011163096 AA	20110707	US20080002642	20080911
US8434635 BB	20130507	US20080002642	20080911
WO10000340 A1	20100107	WO2008EP62075	20080911
ZA201100083 A	20111026	ZA20110000083	20110104

Probable Assignee: IMV INNOVATION MARKETING U VERTRIEBS GMBH

Assignee(s):(std): ANDRE WICHELHAUS ; IMF INNOVEHJSHN MARKETING U FERTRIBS GMBKH ; IMF INNOVEHJSHN MARKETING UND FERTRIBS GMBKH ; IMV INNOVATION MARKETING U V ; IMV INNOVATION MARKETING U VERTRIBS GMBH ; IMV INNOVATION MARKETING UND V ; WICHELHAUS ANDRE ; IMV INNOVATION MARKETING UND VERTRIEBS GMBH ; IMV INNOVATION MARKETING U VERTRIEBS GMBH ; IMV INNOVTION MARKETING UND VERTRIEBS GMBH ; IMV INNOVTION MARKETING U VERTRIEBS GMBH

Assignee(s): IMV INNOVATION MARKETING UND VERTRIEBS GMBHDE

Inventor(s):(std): VIKHEL KHAUS ANDRE ; WICHELHAUS ANDRE ; ANDRE WICHELHAUS

Inventor(s): VIKHEL'KHAUS ANDRE

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; FB RICE; BLAKE CASSELS AND GRAYDON LLP; VIERING JENTSCHURA AND PARTNER MBB PATENT U RECHTSANWAELTE; VIERING JENTSCHURA AND PARTNER; VIERING JENTSCHURA AND PARTNER PATENT U RECHTSANWAELTE; VIERING JENTSCHURA AND PARTNER MBB PATENT U RECHTSANWAELTE; LLAGOSTERA MARIA DEL CARMEN; PEARL COHEN ZEDEK LATZER BARATZ; SCHLEE IP INTERNATIONAL P C; ALEXANDER R; SCHLEE IP INT PC; VIERING HANS MARTIN

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B23P11/00 B31B1/00 B65D B65D17/00 B65D17/28 B65D17/32 B65D17/34 B65D17/44 B65D39/00 B65D39/02 B65D39/04 (Advanced/Invention); B65D17/28 B65D17/34 B65D17/44 (Advanced/Non–invention); B65D17/00 B65D17/28 B65D17/32 B65D17/34 (Core/Invention); B65D17/32 B65D17/34 (Core/Non–invention); B65D (Subclass/Invention)

International class (IPC 1–7): B65D17/00 B65D17/28 B65D17/32 B65D17/34

CPC: Y10T29/49947 B65D17/166 B65D2517/0014 B65D2517/0034 Y02W30/807

European class: B65D17/16B2B L65D517/00Y2C L65D517/00Y5A1

US class: 220/270 29/525.01 493/52 493/52S

Classification Explorer

Cited documents: WO06009483 A2, WO06000020 A1, US7500577 BB, US6059137 A, US5129773 A, US4877129 A, US4865215 A, US4463866 A, US4442950 A, US4433792 A, US4018178 A, US3820681 A, US3625392 A, US3325043 A, US3223277 A, US2120186 A, US2007062946 AA, US2006163254, TWM317400, TWM305182, JP2006510553 T2, JP2004001782 A2, JP11091779 A2, FR2826940 A1,

Forward Citations: US9333289, US2012012586, US2011036840, CN105416765, CN103318510, CN103003164, CN103003164, AU2013202423,

Abstract:
Source: US2011163096A Re–closable can end lid with a rotatable opening and re–sealing tab, and drink can equipped with the re–sealable can end lid, wherein a lid plate (2) includes a break–away portion (8) surrounded by a predetermined break–line (9) that is separable from the lid plate by the press portion (21) of an opening tab (20) in an opening position of the tab, so that an aperture (10) is created in the lid plate that is surrounded by a ring–wall (11) on the outside of the predetermined break–line (9). On a grip portion (22) of the opening tab (20), a sealing attachment (25) is formed that, after rotating the opening tab (20) into a closing rotating position, fits into a recess surrounded by the ring–wall and sealingly engages on the inner face of the ring–wall (11) along its outer circumferential sealing rim.

6) Family number: 53291841 (US2013075296A) © PatBase

Title: MARKING OF CAN ENDS AND/OR PULL TABS USING PHOTONICALLY SENSITIVE INK

Priority: AU20120316033 20120927 AU20160201319 20160301 US20120628968 20120927 US20120347796 20120927 US20120345547 20120927 US20110539784P 20110927 US20120629071 20120927 WO2012US57507 20120927 WO2012US57518 20120927

Family:

Publication number	Publication date	Application number	Application date
AU2012316033 AA	20130404	AU20120316033	20120927
AU2012316040 AA	20130404	AU20120316040	20120927
AU2016201319 AA	20160317	AU20160201319	20160301
AU2016201319 BB	20170504	AU20160201319	20160301
BR112014007448 A2	20170404	BR20141107448	20120927
BR112014007452 A2	20170425	BR20141107452	20120927
CA2850174 AA	20140326	CA20122850174	20120927
CA2850176 AA	20140326	CA20122850176	20120927
CN103946119 A	20140723	CN201280058178	20120927
CN104024115 A	20140903	CN201280058176	20120927
CO6920277 A2	20140410	CO20140066683	20140328
CO6920278 A2	20140410	CO20140066693	20140328
EP2760752 A1	20140806	EP20120772649	20120927
EP2797818 A2	20141105	EP20120779215	20120927
HK1200420 A1	20150807	HK20150100738	20150123
HK1201502 A1	20150904	HK20150101959	20150227
JP2015501259 T2	20150115	JP20140533311T	20120927
JP2015502890 T2	20150129	JP20140533312T	20120927
MX2014003640 A1	20140521	MX20140003640	20120927
MX2014003772 A1	20140801	MX20140003772	20120927
MX337706 B	20160315	MX20140003640	20120927
RU2014116968 A	20151110	RU20140116968	20120927
RU2615105 C2	20170403	RU20140116968	20120927
SG11201400991W A	20140428	SG20141100991	20120927
SG11201401005W A	20140926	SG20141101005	20120927
TH143434 A	20151012	TH20141001665	20120927
TH145720 A	20160215	TH20141001716	20120927
US2013075296 AA	20130328	US20120629071	20120927
US2014084003 AA	20140327	US20120628968	20120927
US2014291322 AA	20141002	US20120347796	20120927
US2015034649 AA	20150205	US20120345547	20120927
US9187221 BB	20151117	US20120628968	20120927
US9278776 BB	20160308	US20120345547	20120927
US9637267 BB	20170502	US20120347796	20120927
WO13049313 A2	20130404	WO2012US57507	20120927
WO13049313 A3	20130523	WO2012US57507	20120927
WO13049320 A1	20130404	WO2012US57518	20120927

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std): CROWN PACKAGING TECHNOLOGY INC ; CROWN PACKAGING TECHONOLOGY INC ; VAUGHAN LAURA JANE ; GROWN PACKAGING TECHNOLOGY INC ; KRAUN

PEKEDZHING TEKNOLODZHI INK

Assignee(s): COLVILLE STEPHEN MILES ; RAMSEY CHRISTOPHER PAUL ; MCGIRR LAURA JANE ; DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS

Inventor(s):(std)**:** CHRISTOPHER PAUL RAMSEY ; COLVILLE STEPHEN MILES ; CRISTOPHER PAUL RAMSEY ; LAURA JANE MCGIRR ; MAKDZHIRR LAURA DZHEJN ; MCGIRR LAURA JANE ; RAMSEY CHRISTOPHER PAUL ; REMSI KRISTOFER POL ; STEPHEN MILES COLVILLE ; VAUGHAN LAURA JANE

Agent(s): PETER MAXWELL AND ASSOCIATES; GOWLING LAFLEUR HENDERSON LLP; SILVANA MARIA LOPEZ DIAZ; LIND ROBERT; INO SARI; DESHIMARU TAKESHI; MATSUSHITA MITSURU; KURASAWA ICHIRO; KUMAKURA YOSHIO; BAKER AND HOSTETLER LLP; FULLMER HAROLD H

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B05D3/06 B21D51/38 B21D51/44 B23K26/00 B23K26/36 B41M5/26 B41M5/28 B41M5/30 B41M5/323 B41M5/46 B65B43/00 B65D17/00 B65D17/34 B65D17/347 B65D17/353 B65D25/20 B65D41/32 B65D51/00 B65D51/24 G06K1/12 G06K19/06 G06K19/10 G06K7/00 (Advanced/Invention);
B21D51/38 B41M5/24 (Advanced/Non–invention);
B41M5/26 B65D17/00 G06K19/06 (Core/Invention);
B41M B65D G06K (Subclass/Invention)

CPC: B65D17/161 B21D51/383 B65D41/32 B41M5/24 B41M5/28 B65D17/165 B65D2517/0052 B65D2517/0053 B65B61/26 B65D51/245 B65B43/00 B65D51/00 B23K26/364 B23K26/361

US class: 1/1 206/459.5 219/121.85 220/212 220/270 220/273 413/14 413/18 413/25 427/556 53/492

Classification Explorer

Cited documents: WO9909853 A2, WO9711892 A1, WO9530546 A1, WO09093028 A2, WO07007102 A2, WO05068207 A1, WO02068205 A1, WO0183308 A1, WO0168460 A2, WO0043456 A1, WO0003832 A1, US8543424 BB, US7914640 BB, US7485403 BB, US7150597 BB, US6926487 BA, US6854947 BB, US6777098 BB, US6706995 BB, US6634516 BB, US6602595 BB, US6590183 BA, US6501046 BA, US6498318 BA, US6479787 BA, US6476349 BA, US6433302 BA, US6157314 A, US6105806 A, US6080958 A, US6019831 A, US6017972 A, US5992892 A, US5928780 A, US5911921 A, US5884079 A, US5682983 A, US5578120 A, US5511920 A, US5492077 A, US5489639 A, US5350792 A, US5273149 A, US5053440 A, US4880137 A, US4559961 A, US4559729 A, US4476781 A, US4375025 A, US3898417 A, US2013270269 AA, US2013196037 AA, US2012205386 AA, US2011226636 AA, US2011111142 AA, US2011100854 AA, US2011084051 AA, US2010264215 AA, US2010193519 AA, US2010078010 AA, US2010058630 AA, US2010056830 AA, US2010015558 AA, US2009117353 AA, US2007080229 AA, US2005270358 AA, US2005045637 AA, US2004108237 AA, US2003192211 AA, US2001011431 AA, JPS4982340, JP8127670 A2, JP4982340 B2, JP49082340 A2, JP2011020701 A2, JP2011016546 A2, JP2010004523 A2, JP2005324816 A2, JP2001063729 A2, JP11001065 A2, GB2309215 A1, EP1365923 B1, EP1365923 A1, EP1218248 B1, EP1218248 A2, EP1113901 A1, EP0993964 A2, EP0797511 A1, EP0522370 A1, DE10254060 A1, CN201890427 U, CN101445170 A, CA2307074 AA, CA2301655 AA, CA2301655,

Forward Citations: WO17012344, WO17008725, WO16192419, WO16183452, WO15013081, WO14072455, WO14072455, USD776530, USD688553, US9340368, US9259913, CN105819062, CN105691824, CN105517924, CN105398647, CN105151470, CN105151469, AU2014293487,

Abstract:
Source: US2013075296A A system and method for laser marking can ends, especially pull tabs, includes coating a portion of the can end and/or pull tab with a lacquer having a photonically active material and directing a laser to the lacquer to alter the appearance of the of the photonically active material to form an image, especially a high resolution image. The decorated can end and/or tabs may have a high resolution image.

0) US2008314906A – CAN END AND METHOD OF MAKING SAME

7) Family number: 42755394 (US2008314906A) © PatBase

Title: CAN END AND METHOD OF MAKING SAME

Priority: EP20080770829 20080612 US20070945614P 20070622 US20080137958 20080612 WO2008US66698 20080612 US20120347262 20120110 US20140529668 20141031

Family:

Publication number	Publication date	Application number	Application date
CN101778774 A	20100714	CN200880025640	20080612
CN101778774 B	20120718	CN200880025640	20080612
DE602008041006 D1	20151217	DE200860041006T	20080612
EP2160332 A2	20100310	EP20080770829	20080612
EP2160332 A4	20110810	EP20080770829	20080612
EP2160332 B1	20151104	EP20080770829	20080612
JP2010530835 T2	20100916	JP20100513340T	20080612
JP5318097 B2	20131016	JP20100513340T	20080612
US2008314906 AA	20081225	US20080137958	20080612
US2012118891 AA	20120517	US20120347262	20120110
US2015069062 AA	20150312	US20140529668	20141031
US8109405 BB	20120207	US20080137958	20080612
US8904843 BB	20141209	US20120347262	20120110
WO09002715 A2	20081231	WO2008US66698	20080612
WO09002715 A3	20091230	WO2008US66698	20080612

Probable Assignee: STOLLE MACHINERY CO LLC

Assignee(s):(std)**:** BUTCHER GREGORY H ; STOLLE MACHINERY CO ; STOLLE MACHINERY CO LLC ; WILLIAMS GREG S

Assignee(s): STOLLE MACHINERY CO LLC CENTENNIAL ; STOLLE MACHINERY COMPANY LLC

Inventor(s):(std)**:** BUTCHER GREGORY H ; WILLIAMS GREG S

Inventor(s): WILLIAMS GREG S WAPAKONETA ; BUTCHER GREGORY H URBANA

Agent(s): LEINWEBER AND ZIMMERMANN; PARRY SIMON JAMES; ECKERT SEAMANS CHERIN AND MELLOTT; ECKERT SEAMANS ET AL; GRANT E; ECKERT SEAMANS CHERIN AND MELLOT LLC; JOHN P; COFFIELD GRANT E ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D22/00 B21D31/06 B21D51/38 B21D51/44 B65D17/00 B65D17/32 B65D17/34 B65D17/353 B65D41/32 (Advanced/Invention); B21D31/00 B65D17/28 (Core/Invention)

CPC: B65D17/163 B21D51/383 B65D2517/0016 B65D2517/0061 B65D2517/0073 B65D2517/0076 B21D51/443

European class: B21D51/38B B65D17/16B1 L65D517/00Y2D L65D517/00Y7A1 L65D517/00Y7B3 L65D517/00Y7C1

US class: 220/269 220/270 220/271 220/272 220/273 413/14 413/14S 72/348 72/379.2 72/379.200S

Classification Explorer

Cited documents: USD425419 S1, USD422911 S1, USD402555 S1, USD397296 S1, USD396635 S1, USD382481 S1, USD328032 S1, USD312404 S1, USD307720 S1, USD296990 S1, USD289017 S1, US7891519 BB, US7270246 BB, US6575684 BB, US6375029 BB, US6050440 A, US5875911 A, US5688094 A, US5462396 A, US5328313 A, US5252019 A, US5232114 A, US5217134 A, US5052573 A, US5038956 A, US4848623 A,

US4804106 A, US4610156 A, US4417668 A, US4416390 A, US4386713 A, US4182460 A, US4146149 A, US4096967 A, US4044915 A, US4043479 A, US4014455 A, US4002262 A, US3989161 A, US3951299 A, US3929252 A, US3915334 A, US3863801 A, US3838788 A, US3768692 A, US3724709 A, US3655091 A, US3606076 A, US3334777 A, US3208628 A, US2008078764 AA, US2008014050 AA, US2007278230 AA, US2007218194 AA, US2007039961 AA, US2006039780 AA, US2005252917 AA, US2004099665 AA, US2004056032 AA, US2002014489 AA, JPS5294291, JP5213351 A2, JP52094291 A2, JP3133740 A2, JP2007153428 A2, JP2003053458 A2, FR1567836 A, EP1052039 A1,

Forward Citations: WO13022592, USD694108, US9573724, US9550604, US9376233, US9199763, US9181007, US9128212, US9016504, US9016034, US8978915, US8939308, US8825461, US8818780, US8646643, US8454292, US2015144633, US2015129595, US2012279967, US2012263835, US2012199586, US2011147382, US2010287886, JP2015518802, JP2013503788,

Abstract:
Source: US2008314906A A can end is provided, which includes a severable panel, a peripheral scoreline defining the periphery of the severable panel, an opening mechanism such as a pull tab, a rivet coupling the pull tab to the severable panel, and a rivet base scoreline in the public side of the severable panel within about 0.025 inch or less of the stem of the rivet. The rivet base scoreline includes an arcuate head portion, first and second arm portions extending from the arcuate head portion, and first and second ends. The base of the rivet has a radius of curvature forming an intersection between the stem of the rivet and the public side of the severable panel. The arcuate head portion of the rivet base scoreline is contiguous with the radius of curvature. The pull tab includes a nose portion having a number of apertures aligned with corresponding portions of the rivet base scoreline disposed thereunder.

0) US2009173737A – RESEALABLE BEVERAGE CAN END AND METHODS RELATIN...

8) Family number: 41968247 (US2009173737A) © PatBase

Title: RESEALABLE BEVERAGE CAN END AND METHODS RELATING TO SAME

Priority: EP20080847064 20081107 EP20120193488 20081107 US20070986955P 20071109 GB20080007762 20080429 GB20080015360 20080822 US20080267159 20081107 WO2008US82753 20081107 US20120685085 20121126 US20110202224 20111104 US20130835562 20130315 WO2010EP52159 20100219

Family:

Publication number	Publication date	Application number	Application date
AU2008323856 AA	20090514	AU20080323856	20081107
AU2008323856 BB	20131121	AU20080323856	20081107
CA2705001 AA	20090514	CA20082705001	20081107
CA2705001 C	20160105	CA20082705001	20081107
CN101910010 A	20101208	CN200880123619	20081107
CN101910010 B	20130102	CN200880123619	20081107
DE602008021438 D1	20130314	DE200860021438T	20081107
DE602008042560 D1	20160407	DE200860042560T	20081107
EP2219961 A1	20100825	EP20080847064	20081107
EP2219961 B1	20130102	EP20080847064	20081107
EP2562093 A2	20130227	EP20120193488	20081107
EP2562093 A3	20130403	EP20120193488	20081107
EP2562093 B1	20160224	EP20120193488	20081107
ES2408700 T3	20130621	ES20080847064T	20081107
GB200807762 A0	20080604	GB20080007762	20080429
GB200815360 A0	20081001	GB20080015360	20080822
JO2817 B	20140915	JO20080000513	20081109
MX2010005156 A1	20101004	MX20100005156	20081107
MY155590 A	20151113	MY20100002144	20081107
NZ585238 A	20121130	NZ20080585238	20081107
RU2010123373 A	20111220	RU20100123373	20081107
RU2488531 C2	20130727	RU20100123373	20081107
TH135047 A	20140704	TH20081005785	20081110
US2009173737 AA	20090709	US20080267159	20081107
US2013082055 AA	20130404	US20120685085	20121126
US2013206766 AA	20130815	US20130835562	20130315
US8336726 BB	20121225	US20080267159	20081107
US8931656 BB	20150113	US20120685085	20121126
WO09062004 A1	20090514	WO2008US82753	20081107

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** SMITH DEBRA J C ; FARROW SYLVIA MARIA ; MANAUT VINCENT ; PRESTIDGE MARK JONATHAN ; STUART IAIN CHARLES EDWARD ; RAMSEY CHRISTOPHER PAUL ; PARIS ALEXANDRE ; UNWIN MICHAEL ; ALTHORPE CHRISTOPHER ; COMBE FLORIAN CHRISTIAN GREGOR ; COMBE FLORIAN CHRISTIAN GREGORY ; CROWN PACKAGING TECHNOLOGY INC ; KRAUN PEHKEHDZHING TEKNOLODZHI INK

Assignee(s): DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; CROWN PACKAGING TECHNOLOGY INC ALSIP

Inventor(s):(std)**:** CHRISTOPHER ALTHORPE ; CHRISTOPHER PAUL RAMSEY ; COMBE FLORIAN CHRISTIAN GREGOR ; COMBE FLORIAN CHRISTIAN GREGORY ; EDWARD STUART IAIN CHARLES ; FARROW SYLVIA MARIA ; FEHRROU SIL VIJA MARIJA ; FLORIAN CHRISTIAN GREGORY COMBE ; GREGOR COMBE FLORIAN CHRISTIAN ; GREGORY COMBE FLORIAN CHRISTIAN ; IAIN CHARLES EDWARD STUART ; JONATHAN

PRESTIDGE MARK ; JUNVEHN MISHAL ; KOMBE FLORIAN KRISTIAN GREGORI ; MANAUT VINCENT ; MANO VENSAN ; MANUAT VINCENT ; MARIA FARROW SYLVIA ; MARK JONATHAN PRESTIDGE ; MICHAEL UNWIN ; OLTORP KRISTOFER ; PARI ALEKSANDR ; PARIS ALEXANDRE ; PAUL RAMSEY CHRISTOPHER ; PRESTIDGE MARK JONATHAN ; ALEXANDRE PARIS ; ALTHORPE CHRISTOPHER ; PRESTIDZH MARK DZHONATAN ; RAMSEY CHRISTOPHER PAUL ; REHMSI KRISTOFER POL ; STJUART AJAN CHARL Z EHDVARD ; STUART IAIN CHARLES EDWARD ; STUART LAIN CHARLES EDWARD ; SYLVIA MARIA FARROW ; UNWIN MICHAEL ; VINCENT MANAUT

Inventor(s): RAMSEY CHRISTOPHER PAUL WANTAGE ; ALTHORPE CHRISTOPHER PENYLAN ; PRESTIDGE MARK JONATHAN FARINGDON

Agent(s): PETER MAXWELL AND ASSOCIATES; SMART AND BIGGAR; MARKS AND CLERK LUXEMBOURG LLP; SMITH DEBRA JANE CLARE; LIND ROBERT; CARPINTERO MARIO; WOODCOCK WASHBURN LLP; BAKER AND HOSTETLER LLP; FULLMER HAROLD H ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/40 B21D51/44 B65D17/00 B65D17/28 B65D17/34 B65D17/50 B65D41/32 B65D43/04 B65D51/16 B65D51/18 B65D51/20 B65D51/22 (Advanced/Invention); B65D17/00 B65D51/16 B65D51/18 B65D51/22 (Core/Invention)

CPC: B65D51/20 B65D17/165 B21D51/40 B21D51/443 B65D17/506 B65D2101/0023 B65D2205/02 B65D2517/5091

European class: B65D17/50B L65D101/00A3 L65D205/02 L65D517/50Q99

US class: 220/254.3 220/254.9 220/258.2 220/258.200P 220/258.5 220/258.500S 220/259.1 220/259.100S 220/259.5 220/269 220/361 413/15 413/4 413/8

Classification Explorer

Cited documents: WO9836987 A1, WO9609968 A1, WO9504709 A1, WO9110600 A1, WO09062004, WO08068169 A1, WO08054636 A2, WO07128810 A1, WO07039367 A1, WO04056667, WO03062084 A1, WO0200512 A1, WO0128875 A1, US7198168 BB, US7168586 BB, US7152766 BA, US6763963 BA, US6626314 BA, US6588617 BA, US6581264 BB, US6105806 A, US6065634 A, US5947317 A, US5829610 A, US5813561 A, US5711447 A, US5692633 A, US5622273 A, US5615808 A, US5351853 A, US5335808 A, US5242073 A, US5199618 A, US5199591 A, US5148935 A, US5085338 A, US4951835 A, US4930654 A, US4915290 A, US4821912 A, US4746032 A, US4681238 A, US4676411 A, US4576306 A, US4540611 A, US4462504 A, US4440310 A, US4431110 A, US4407423 A, US4397403 A, US4397400 A, US4369888 A, US4361244 A, US4266688 A, US4170724 A, US4150777 A, US4136797 A, US4127221 A, US4122970 A, US4113134 A, US4098439 A, US4054205 A, US3952911 A, US3910410 A, US3871544 A, US3788512 A, US3744662 A, US3705670 A, US3622034 A, US3520440 A, US3450301 A, US3447713 A, US3406867 A, US3386613 A, US3287053 A, US3262612 A, US3250425 A, US3190410 A, US2011233227 AA, US2010294768 AA, US2009179033 AA, US2008314904 AA, US2008110887 AA, US2008053997 AA, US2007262079 AA, US2007215620 AA, US2007164026 AA, US2007145055 AA, US2007068943 AA, US2006201944 AA, US2006163253 AA, US2005173453 AA, US2005150889 AA, US2005115977 AA, US2005051553 AA, US2003178433 AA, US2003062370 AA, US2002050493 AA, RU2309099 C2, NZ529214 A, KR200017742 A, KR20000017742 A, JPS6148128, JP61048128 A2, JP2003112735 A2, JP2003054549 A2, GB2320008 A1, GB2154561 A1, FR1434827 A, EP1767464 A1, EP0828663 B1, EP0305598 A1, EP0088185 A1, AU2007247102 AA,

Forward Citations: WO17016686, WO16130705, WO14137582, WO12095593, WO11124552, USD781707, USD762114, USD757541, USD750488, USD749415, USD747649, USD747199, USD727725, USD715647, USD715144, USD617136, US9637269, US9517866, US9463910, US9446879, US9272823, US9272819, US9233784, US8985371, US8931656, US8857644, US8844761, US8844744, US8833585, US8807340, US8336726, US8336725, US8240498, US8157435, US7918359, US2016000246, US2013228586, US2012012586, US2011233227, US2011203368, US2011006062, US2010294768, US2010232256, US2009179033, US2008110887, US2007262079, US2007068943, JP2013523548, GB2528619, FR2970239, EP2432704, CN105473455, CN104520202, CN102917958,

Abstract:
Source: US2009173737A A recloseable and resealable beverage can end closure includes a base plate beneath the center panel and a tab plate above the center panel. The closure is slidable relative to the center a panel to uncover the pour aperture and then to position the closure over the pour aperture to enable resealing.

0) US2014008365A – CAN END AND RELATED METHOD

9) Family number: 55520252 (US2014008365A) © PatBase

Title: CAN END AND RELATED METHOD

Priority: US20120669365P 20120709 US20130801115 20130313 US20150599938 20150119

Family:

Publication number	Publication date	Application number	Application date
US2014008365 AA	20140109	US20130801115	20130313
US2015129596 AA	20150514	US20150599938	20150119
US8966865 BB	20150303	US20130801115	20130313
WO15099636 A2	20150702	WO2013US46816	20130620
WO15099636 A3	20150820	WO2013US46816	20130620

Probable Assignee: SILGAN CONTAINERS LLC

Assignee(s):(std)**:** SILGAN CONTAINERS LLC

Inventor(s):(std)**:** BAKER GERALD J ; GUST DONALD M ; WIDITORA ALVIN

Agent(s): REINHART BOERNER VAN DEUREN SC; SMYCZEK ALEC D ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D21/00 B21D51/26 B21D51/38 B65B61/18 B65D1/12 B65D17/00 B65D17/34 (Advanced/Invention)

CPC: B21D21/00 B21D51/383 B65B61/184 B65D2517/0014 B65D17/163 B65D2517/0016 B21D51/2661 B65D17/165 B65D17/16

US class: 220/260 220/269 413/2 53/412 53/440 53/471 53/486

Classification Explorer

Cited documents: WO10026019 A1, US8695832 BB, US5804237 A, US4576304 A, US4253582 A, US3986633 A, US3622055 A, US3322295 A, US2029329 A, US2010326281 AA, US2010025402 AA, JP2008189349 A2,

DE102010013531 A1

Forward Citations: USD766112, USD739266, US9468964,

Abstract:
Source: US2014008365A A can end and a tab configured to couple to the can end and a related method are provided. The can end is continuous. The tab is configured to couple to the can end with a post, which couples the tab to the can end without passing through the can end.

0) US2014054290A – ROTATING TAB

10) Family number: 55882399 (US2014054290A) © PatBase

Title: ROTATING TAB

Priority: US20120692758P 20120824 US20130974265 20130823 US20140519575 20141021 WO2013US56326 20130823

Family:

Publication number	Publication date	Application number	Application date
CN104703886 A	20150610	CN201380049522	20130823
CN104703886 B	20170609	CN201380049522	20130823
EP2888173 A2	20150701	EP20130830693	20130823
EP2888173 A4	20160323	EP20130830693	20130823
JP2015526354 T2	20150910	JP20150528674T	20130823
US2014054290 AA	20140227	US20130974265	20130823
US2015053681 AA	20150226	US20140519575	20141021
US8893913 BB	20141125	US20130974265	20130823
US9102451 BB	20150811	US20140519575	20141021
WO14031926 A2	20140227	WO2013US56326	20130823
WO14031926 A3	20140424	WO2013US56326	20130823

Probable Assignee: STOLLE MACHINERY CO LLC

Assignee(s):(std)**:** STOLLE MACHINERY CO LLC

Inventor(s):(std)**:** MCCLUNG JAMES A ; DAVIDSON JASON A ; CARSTENS AARON E ; BUTCHER GREGORY H

Agent(s): PARRY SIMON JAMES; MARUYAMA AND CO; ECKERT SEAMANS CHERIN AND MELLOTT LLC; GRANT E; COFFIELD GRANT E ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/28 B65D17/34 B65D17/36 B65D51/16 (Advanced/Invention); B65D17/00 (Advanced/Non–invention)

CPC: B65D2517/0092 B65D51/1677 B65D17/165 B65D2517/0014

US class: 1/1 220/269 220/270 220/271 220/272 413/17

Classification Explorer

Cited documents: WO9527661 A1, WO12018549 A1, WO08023983 A1, US5456378 A, US5397014 A, US5285919 A, US5131555 A, US5011037 A, US3856184 A, US2856184 A, US2012199587 AA, US2012031056 AA, US2011266281 AA, US2011056946 AA, US2010294771 AA, US2008011786 AA, NL1023297 C1, NL1023297 A, EP2038178 B1, CN101821168 A,

Forward Citations: USD762114, USD750488, USD749415, USD731887, USD727725, USD715647, USD715144, US9446879, US9403628, US9271978, US9233784, US9162795,

Abstract:
Source: US2014054290A A rotating tab is provided. The tab includes a body having a first end and a second end disposed opposite and distal from the first end, a nose portion located at or about the first end of the tab, a lift portion located at or about the second end of the tab, and a rivet receiving portion disposed proximate the nose portion. The rivet receiving portion includes a rivet hole. A rivet extends through the rivet hole and is staked to fasten the rivet receiving portion of the tab to a can end. The body of the tab is structured to be rotated about the rivet to align a portion of the tab with a secondary scoreline in the can end. A portion of the tab is structured to be depressed to sever the secondary scoreline to vent the can end.

0) US2015158627A – CAN END

11) Family number: 51417462 (US2015158627A) © PatBase

Title: CAN END

Priority: EP20130719063 20130419 GB20120006989 20120420 WO2013EP58228 20130419

Family:

Publication number	Publication date	Application number	Application date
CA2870498 AA	20141015	CA20132870498	20130419
CN104245523 A	20141224	CN201380020664	20130419
CN104245523 B	20160420	CN201380020664	20130419
DE602013006507 D1	20160525	DE201360006507T	20130419
EP2838805 A1	20150225	EP20130719063	20130419
EP2838805 B1	20160413	EP20130719063	20130419
ES2575180 T3	20160627	ES20130719063T	20130419
GB201206989 A0	20120606	GB20120006989	20120420
PL2838805 T3	20160930	PL20130719063T	20130419
SG11201406256Y A	20141127	SG20141106256	20130419
TH149676 A	20160504	TH20141006201	20130419
TR201609174 T4	20160721	TR20160009174T	20130419
US2015158627 AA	20150611	US20130394333	20130419
WO13156624 A1	20131024	WO2013EP58228	20130419

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC ; CROWN PACKAGING UK PLC

Assignee(s): WINSTANLEY LUCY ; RAMSEY CHRISTOPHER PAUL ; CAUNTER NICHOLAS JAMES ; CROWN PACKAGING TECHNOLOGY INC ALSIP ; CROWN PACKAGING TECHNOLOGY INC11535 SOUTH CENTRAL AVENUEALSIPIL60803–2599US

Inventor(s):(std)**:** RAMSEY CHRISTOPHER PAUL ; WINSTANLEY LUCY ; CAUNTER NICHOLAS JAMES

Inventor(s): CHRISTOPHER PAUL RAMSEY ; WINSTANLEY LUCYGB ; RAMSEY CHRISTOPHER PAULGB ; CAUNTER NICHOLAS JAMESGB

Agent(s): MARKS AND CLERK; MARKS AND CLERK LUXEMBOURG LLP; LIND ROBERT; CARPINTERO MARIO; TOLGA CAYLAK; SMITH DEBRA

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B21D51/38 B21D51/44 B65D17/00 B65D51/24 (Advanced/Invention); B65D17/00 (Core/Invention)

CPC: B65D2517/0011 B65D2517/0053 B65D51/245 B21D51/383 B21D51/443 B65D17/165

US class: 220/270 413/14

Classification Explorer

Cited documents: US5492077 A, US5386795 A, CN101670903 A,

Forward Citations: USD762114, USD750488, USD749415, US9446879, US9233784, US2013118133,

Abstract:
Source: US2015158627A A can end (2) for a drinks can (1). The can end (2) is provided with a tab (5) attached to the can end (2) with a rivet (6). The tab (5) is initially flush against the can end (2), causing rotation to be restricted by friction between the tab (5) and the can end (2). However, once the drinks can (1) has been opened, the tab (5) is raised from the can end (2) and is easily rotatable about the rivet (5) to form a rotatable pointer. Additionally, the

can end (2) includes two raised portions (13) disposed on either side of the tab (5), each raised portion (13) being arranged to limit the degree of rotation of the tab (5) about the rivet (6)

0) US3257258A – APPARATUS FOR MANUFACTURING FRANGIBLE CLOSURES ...

12) Family number: 31446353 (US3257258A) © PatBase

Title: APPARATUS FOR MANUFACTURING FRANGIBLE CLOSURES FOR CONTAINERS

Priority: IT19630021022 19630919 US19610156188 19611124

Family:

Publication number	Publication date	Application number	Application date
CH432439 A	19670331	CH19620013574	19621120
CH478606 A	19690930	CH19640012147	19640918
GB1030407 A	19660525	GB19620044418	19621123
GB1086356 A	19671011	GB19640038448D	19640921
JP52045106 B4	19771112	JP19640053636	19640919
US3257258 A	19660621	US19610156188	19611124

Probable Assignee: CANTOP INC

Assignee(s):(std)**:** CANTOP INC ; JANE BROWNING SUSAN ; RALPH D ANDREA ANGELO ; WALSH JAMES J

Inventor(s):(std)**:** JAMES JOSEPH WALSH ; JANE BROWNING SUSAN ; JOHN KEITH BROWNING ; JOHN WILLIAM RATHEMACHER ; RALPH D ANDREA ANGELO ; WALSH JAMES J ; ANGELO RALPH D ANDREA

Inventor(s): BROWNING SUSAN JANE ; D ANDREA ANGELO RALPH ; WILLIAM RATHEMACHER JOHN ; JOSEPH WALSH JAMES ; KEITH BROWNING JOHN

International class (IPC 8–9)**:** B21D51/38 B65H29/46 H04N11/18 (Advanced/Invention); B21D51/38 B65H29/38 H04N11/06 (Core/Invention)

International class (IPC 1–7)**:** B21D51/44 B65D41/32 B65G57/30 B65H29/46

CPC: H04N11/18 Y10T156/1072 Y10T156/1089 Y10T156/1309 Y10T156/1339 Y10T156/1771 B21D51/383

European class: 64B23A3B B21D51/38B H04N11/18

US class: 156/262 156/293 156/297 156/514 156/521 156/567

Classification Explorer

Cited documents: US3061502 A, US3052588 A, US3051477 A, US3020188 A, US2999531 A, US2995805 A, US2995358 A, US2934812 A, US2788834 A, US2778766 A, US2710702 A, US2646104 A, US2608341 A, US2549808 A, US2035375 A, US2035374 A, US2017124 A, US1942145 A, US1811571 A, US1292217 A, US1259613 A,

Forward Citations: US5059360, US2003144853, GB2129339,

Abstract:
Source: GB1030407A 1,030,407. Making closures for can ends. CONTOP Inc. Nov. 23, 1962 [Nov. 24, 1961], No. 44418/62. Heading B3A. [Also in Divisions B2, B4, B5, B6 and B8] Can end blanks are supplied in pairs on guide members 391, 417, 418, forming part of a reciprocable shuttle, to pairs of dies, the first pair 532, 533 embossing instructions on each blank and the second pair, which are compound dies, Fig. 34 (not shown), having parts arranged to cut interrupted lines and a tear tab, and to form embossed ribs on the blanks. The die plate 525 of the first pair is vertically reciprocable on posts 361 by means of gearing 492, 495, and a shaft 497 with an eccentric end 500. The compound dies, to which the shuttle next delivers the pairs of blanks, have each a male die 566 and a vertically reciprocable female die 604. The male die 566, Fig. 35 (not shown), has a cutting edge 570 interrupted at 571, cutting edges 572, depressions 574, and a U–shaped cutting edge 575 within which a pressure pad 580 is urged upwards by a spring 594. A member 596 has a dished upper surface for forming a rib on the tab of the finished closure. The pad 580 strips the can end blanks from the male die. The blanks may be formed of steel, aluminium or plastics material. Punching and forming fragible sheet.–Vertically reciprocable dies 1283, 1284, Fig. 73, cooperating with die rings 1405, 1406 cut out discs from aluminium foil or thin gauge plastics sheet drawn through the die mechanism by means of reciprocable grippers 1042, Fig. 65 (not shown). An upper die plate 1280 is cam–operated through a lever 1313 to rise and fall in timed relation with an intermittently rotated turret mechanism comprising a pair of castings 1580, 1581 each carrying a radially reciprocable chuck 1600, Fig. 88 (not shown). Bores 1410, 1411 in each die are connected to a source of fluid pressure, thereby enabling the cut–out discs to be forced from the dies into the waiting chucks. Stripper rings 1300, 1302 force the residual sheet from the dies. Each chuck, after further rotation to a position B, Fig. 85 (not shown), acts as a female die against which a male die 1750, Fig. 104 (not shown), operates in order to form the disc with a central depression and a

peripheral flange. The face of the chuck is perforated as at 1621 and is connected to a source of vacuum by means of a fitting 1555, the vacuum thereby holding the cut–out disc in position and stripping it from the die 1750. As the chuck rotates further towards a 6 o'clock position, the vacuum is cut off and fluid pressure is applied to the chuck interior to release the formed disc.

0) US2014271043A – CONVERSION SYSTEM

13) Family number: 57412372 (US2014271043A) © PatBase

Title: CONVERSION SYSTEM

Priority: US20130790363P 20130315 US20130792363P 20130315 US20140211378 20140314 US20140211534 20140314 US20150881234 20151013 US20160092998 20160407 WO2014US28400 20140314 WO2014US28626 20140314

Family:

Publication number	Publication date	Application number	Application date
CN105050747 A	20151111	CN201480015553	20140314
CN105050748 A	20151111	CN201480015587	20140314
EP2969291 A2	20160120	EP20140762557	20140314
EP2969291 A4	20161228	EP20140762557	20140314
EP2969292 A1	20160120	EP20140763889	20140314
EP2969292 A4	20161221	EP20140763889	20140314
HK1212948 A1	20160624	HK20160101058	20160129
HK1213220 A1	20160630	HK20160101082	20160129
JP2016513590 T2	20160516	JP20160502775T	20140314
JP2016517353 T2	20160616	JP20160502850T	20140314
US2014271043 AA	20140918	US20140211378	20140314
US2014271044 AA	20140918	US20140211534	20140314
US2016030996 AA	20160204	US20150881234	20151013
US2016221065 AA	20160804	US20160092998	20160407
US9321097 BB	20160426	US20140211378	20140314
US9393610 BB	20160719	US20140211534	20140314
WO14144119 A1	20140918	WO2014US28400	20140314
WO14144284 A2	20140918	WO2014US28626	20140314
WO14144284 A3	20141030	WO2014US28626	20140314
WO17065773 A1	20170420	WO2015US55709	20151015

Probable Assignee: STOLLE MACHINERY CO LLC

Assignee(s):(std)**:** STOLLE MACHINERY CO LLC

Inventor(s):(std)**:** BAUER RUSSELL ; BUTCHER GREGORY H ; CARPER KENNETH E ; CARSTENS AARON E ; DAVIDSON JASON A ; MCCARTY PATRICK K ; ZUMBERGER NEIL A ; ZUMBERGER NEIL A NA ; MCCARTY PATRICK K PK ; DAVIDSON JASON A JA ; CARSTENS AARON E AE ; BUTCHER GREGORY H GH

Agent(s): PARRY SIMON JAMES; MARUYAMA AND CO; ECKERT SEAMANS CHERIN AND MELLOTT LLC; DAVID C; JENKINS DAVID C ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9)**:** B21D43/02 B21D51/26 B21D51/38 B21D51/44 B30B1/26 B30B1/28 B30B13/00 B30B15/30 F16D67/02 F16D67/04 F16H48/05 F16H48/12 (Advanced/Invention); B21D51/26 B21D51/44 (Advanced/Non–invention); B21D (Subclass/Invention)

CPC: F16H48/12 F16H48/05 F16D67/02 F16D67/04 B21D24/005 B21D51/383 B21D51/26 B21D51/44 B21D51/38 B30B1/00 B30B1/28

US class: 1/1 413/66

Classification Explorer

Cited documents: US7464576 BB, US7234907 BA, US7063492 BA, US5876171 A, US5511920 A, US5209098 A, US5182934 A, US5102278 A, US4918956 A, US4854799 A, US4723882 A, US4568230 A, US4519489 A, US4382737 A, US4106422 A, US4079668 A, US2472452 A, US2014271043 AA, US2008267736 AA, US2007113985 AA, US2002152782 AA, JP8206883 A2, JP6297195 A2, JP52117686 U1, CN2645814 Y, CN2559569 Y, CN103630354 A,

Forward Citations: WO17065773, WO16127263,

Abstract:
Source: US2014271043A A conversion press wherein a crankshaft drives the motion of the tooling assemblies within a number of lanes is provided. The crankshaft is structured to move the tooling assemblies associated with less than the total number of lanes. That is, for example, a four lane conversion press could include two crankshafts each actuating the tooling assemblies of two lanes. In an exemplary embodiment, each lane has a single associated crankshaft.

0) US2015367984A – ECOLOGY CAN END WITH PRESSURE EQUALIZATION PORT...

14) Family number: 61247072 (US2015367984A) © PatBase

Title: ECOLOGY CAN END WITH PRESSURE EQUALIZATION PORT

Priority: US20140312296 20140623 WO2015US37147 20150623

Family:

Publication number	Publication date	Application number	Application date
CA2951394 AA	20161206	CA20152951394	20150623
CN106536358 A	20170322	CN201580041183	20150623
EP3157826 A1	20170426	EP20150734514	20150623
MX2016015817 A1	20170227	MX20160015817	20150623
US2015367984 AA	20151224	US20140312296	20140623
WO15200301 A1	20151230	WO2015US37147	20150623

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** REXAM BEVERAGE CAN CO

Assignee(s): FORREST RANDALL G ; GOGOLA MICHAEL R

Inventor(s):(std)**:** FORREST RANDALL G ; GOGOLA MICHAEL R ; MICHAEL R GOGOLA ; RANDALL G FORREST

Agent(s): SMART AND BIGGAR; TOMKINS AND CO; KLOBUCHAR PETER M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/32 B65D17/347 B65D47/32 (Advanced/Invention); B65D17/00 (Core/Invention)

CPC: B65D17/165 B65D47/32 B65D2517/0013 B65D2517/0091 B65D2517/0014 B65D2517/0062 B65D2517/0071 B65D2517/0074 B65D2517/0082 B65D2517/0092

US class: 220/269

Classification Explorer

Cited documents: WO04009459 A1, US7748557 BB, US6354453 BA, US5860553 A, US5555992 A, US5375729 A, US5335808 A, US5307947 A, US3744667 A, US2013126529 AA, US2009200306 AA, US2003189045 AA, FR2293369 A1,

Forward Citations: US2016052667,

Abstract:
Source: US2015367984A An ecology stay–on tab beverage can end has a first curvilinear segment of frangible score severable to form a vent region and a pressure equalization port. A second curvilinear segment of frangible score has opposing terminal ends separated by a hinge segment of the center panel. The second curvilinear segment of frangible score is severable to form a pour opening. A lifting of a lift end of a tab actuates an opening sequence in which the first curvilinear segment of frangible score is severed causing the vent region and the pressure equalization port to form before the pour opening is completely formed.

0) US2014263320A – BEVERAGE CAN END WITH VENT PORT

15) Family number: 57428422 (US2014263320A) © PatBase

Title: BEVERAGE CAN END WITH VENT PORT

Priority: US20130796645 20130312 WO2014US24802 20140312

Family:

Publication number	Publication date	Application number	Application date
EP2969797 A1	20160120	EP20140725563	20140312
US2014263320 AA	20140918	US20130796645	20130312
US9181007 BB	20151110	US20130796645	20130312
WO14165209 A1	20141009	WO2014US24802	20140312

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** REXAM BEVERAGE CAN CO

Inventor(s):(std)**:** FORREST RANDALL ; GOGOLA MICHAEL ; SIEGAL DEREK

Agent(s): CROOKS ELIZABETH CAROLINE; GREER BURNS AND CRAIN LTD; PETER M; KLOBUCHAR PETER M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/347 B65D51/16 (Advanced/Invention); B65D17/34 (Advanced/Non–invention)

CPC: B65D17/165 B65D2517/0014 B65D2517/0092 B65D2517/0094 B65D51/1677 B65D17/161

US class: 1/1 220/231 220/269

Classification Explorer

Cited documents: WO11031681 A1, WO08023983 A1, USD638704 S1, USD637489 S1, USD569271 S1, USD559680 S1, USD499651 S1, USD432015 S1, USD424438 S1, USD421393 S1, USD416200 S1, USD415425 S1, USD415026 S1, USD411107 S1, USD406236 S1, USD396635 S1, USD387987 S1, USD387666 S1, USD382481 S1, USD371073 S1, USD365988 S1, USD348176 S1, US8573432 BB, US8186532 BB, US8177092 BB, US8113375 BB, US8109405 BB, US7975884 BB, US7942285 BB, US7938290 BB, US7926675 BB, US7922025 BB, US7909196 BB, US7900796 BB, US7891519 BB, US7748557 BB, US7743635 BB, US7721906 BB, US7673768 BB, US7617945 BB, US7513383 BB, US7506779 BB, US7500376 BB, US7384227 BB, US7380684 BB, US7165926 BB, US7165696 BB, US7107783 BB, US7100789 BB, US7000797 BB, US6981608 BB, US6951293 BB, US6935826 BB, US6889862 BB, US6889861 BB, US6877941 BB, US6848875 BB, US6789692 BB, US6761281 BB, US6715629 BB, US6662959 BA, US6604647 BA, US6591999 BA, US6408498 BA, US6405889 BA, US6375029 BB, US6354453 BA, US6330955 BB, US6311860 BA, US6260728 BA, US6234336 BA, US6206220 BA, US6202880 BA, US6196412 BA, US6194011 BA, US6129230 A, US6126029 A, US6079583 A, US6065634 A, US6050440 A, US6024239 A, US6015060 A, US5992677 A, US5979688 A, US5971195 A, US5955127 A, US5947316 A, US5934501 A, US5906288 A, US5883814 A, US5860553 A, US5819973 A, US5782373 A, US5713481 A, US5711448 A, US5695085 A, US5692636 A, US5647499 A, US5555992 A, US5494184 A, US5397014 A, US5375729 A, US5307947 A, US5285919 A, US5244113 A, US5217134 A, US5121851 A, US5052573 A, US5038956 A, US5011037 A, US4971218 A, US4960206 A, US4951836 A, US4928845 A, US4893725 A, US4815655 A, US4778072 A, US4762246 A, US4747511 A, US4741451 A, US4705186 A, US4674649 A, US4577777 A, US4386713 A, US4213538 A, US4182460 A, US4002262 A, US3627168 A, US3485410 A, US3441169 A, US3250425 A, US3221924 A, US2012260613 AA, US2012048870 AA, US2012031056 AA, US2011266281 AA, US2011056946 AA, US2010294771 AA, US2010018976 AA, US2003080132 AA,

Forward Citations: WO17035618, USD762114,

Abstract:
Source: US2014263320A A can end for a beverage container has a center panel with a stay−on tab opening system. A tear panel is defined by a first frangible score and a non−frangible hinge segment. A tab is attached to the center panel by a rivet. The tab has a void region partially surrounding a rivet island. A first circle has a first center point located at a center of the rivet and a first radius equal to a distance from the center of the rivet to a radially outermost point of the void region on a first axis running through the nose and lift ends of the tab and a center of the rivet. A second circle has a coincident center and a second radius less than 2.5 times first radius. A second frangible score is spaced completely radially outwardly from the rivet island and between the first and second circles.

0) US2008078764A – TAB, TOOLING FOR THE MANUFACTURE OF THE TAB AND...

16) Family number: 41668567 (US2008078764A) © PatBase

Title: TAB, TOOLING FOR THE MANUFACTURE OF THE TAB AND METHOD OF MANUFACTURING THE TAB

Priority: US20060643300 20061221 US20060848687P 20061002 US20100693544 20100126

Family:

Publication number	Publication date	Application number	Application date
US2008078764 AA	20080403	US20060643300	20061221
US2010124475 AA	20100520	US20100693544	20100126
US7677404 BB	20100316	US20060643300	20061221
US8161787 BB	20120424	US20100693544	20100126

Probable Assignee: STOLLE MACHINERY CO LLC

Assignee(s):(std)**:** MCELDOWNEY CRAIG ALLEN ; MITCHELL MARK RICHARD ; STOLLE MACHINERY CO LLC

Assignee(s): STOLLE MACHINERY COMPANY LLC ; STOLLE MACHINERY CO ; GOLDMAN SACHS CREDIT PARTNERS LP

Inventor(s):(std)**:** MCELDOWNEY CRAIG ALLEN ; MITCHELL MARK RICHARD

Agent(s): ECKERT SEAMANS CHERIN AND MELLOTT; ECKERT SEAMANS CHERIN AND MELLOTT LLC; GRANT E; ECKERT SEAMAN CHERIN AND MELLOTT LLC

International class (IPC 8–9): B21D22/00 B21D51/44 B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

CPC: B21D51/383 B65D17/165

European class: B21D51/38B B65D17/16B2

US class: 220/269 220/272 220/273 413/12 413/14 413/14S 413/25 413/56 413/66 413/66P 413/8 72/348 72/379.4

Classification Explorer

Cited documents: US5967726 A, US5741105 A, US4681238 A, US4596342 A, US4576305 A, US3795342 A, US3715051 A, US3606076 A, US3425591 A, US2004099665 AA,

Forward Citations: WO11079003, USD695611, USD653109, USD620796, USD612724, USD602776, USD600552, USD600118, USD600117, US9573724, US9550604, US9199763, US9016034, US8978915, US8833585, US8684211, US8646643, US8109405, US2015129595, US2014231432, US2011233227, US2011186575, US2011147382, US2010294768, US2008314906, JP5870034, JP2013514952, CN102725199, CN102725199, CN101869953, AU2012292559,

Abstract:
Source: US2008078764A The invention generally relates to a tab used to open food can ends and beer/beverage can ends. The tab has a nose portion located at a front end of the tab and a lift portion located at a back end of the tab. The tab also has a rivet receiving portion located proximate to the nose portion with a rivet hole. The rivet receiving portion is coupled to the nose portion. The rivet hole has a non–round perimeter with a first diameter portion and a second diameter portion. The first diameter portion has a plurality of first arcuate segments and the second diameter portion has a plurality of notches. The second diameter portion is greater in length than the first diameter portion. Tooling for the manufacture of the tab is also provided. A method for manufacturing the tab is additionally provided as well.

0) US6234337B – SAFE CONTAINER END CLOSURE AND METHOD FOR FABRI...

17) Family number: 20662840 (US6234337B) © PatBase

Title: Safe container end closure and method for fabricating a safe container end closure

Priority: AU19990055437 19990809 AU20030204151 20030513 EP19990941966 19990809 US20010838202 20010420 US19980134435 19980814 WO1999US16708 19990809

Family:

Publication number	Publication date	Application number	Application date
AR020196 AA	20020502	AR1999P104094	19990813
AR061464 AB	20080827	AR2007P102615	20070614
AT290497 E	20050315	AT19990941966T	19990809
AT375306 E	20071015	AT19990078202T	19990809
AU199955437 A1	20000306	AU19990055437	19990809
AU199955437 A5	20000306	AU19990055437	19990809
AU2003204151 AA	20030612	AU20030204151	20030513
AU2003204151 BB	20041111	AU20030204151	20030513
AU762193 B2	20030619	AU19990055437	19990809
CA2340413 AA	20010213	CA19992340413	19990809
CA2340413 C	20050531	CA19992340413	19990809
CL1999001821 A1	20000504	CL19990001821	19990812
CL2009001621 A1	20091127	CL20090001621	20090721
CL45631 B	20090824	CL19990001821	19990812
CN1094870 C	20021127	CN19998012253	19990809
CN1323272 A	20011121	CN19998012253	19990809
DE69924159 D1	20050414	DE19996024159	19990809
DE69924159 T2	20060209	DE19996024159T	19990809
DE69937315 D1	20071122	DE19996037315	19990809
DE69937315 T2	20080717	DE19996037315T	19990809
DK1202913 T3	20050711	DK19990941966T	19990809
EP1202913 A1	20020508	EP19990941966	19990809
EP1202913 A4	20030618	EP19990941966	19990809
EP1202913 B1	20050309	EP19990941966	19990809
EP1514803 A2	20050316	EP20040078202	19990809
EP1514803 A3	20050323	EP20040078202	19990809
EP1514803 B1	20071010	EP20040078202	19990809
ES2239455 T3	20050916	ES19990941966T	19990809
HK1041861 A1	20030815	HK20020103589	20020513
ID29571 A	20010906	ID20010000609	19990809
IL141419 A0	20020310	IL19990141419	19990809
IL141419 A1	20040831	IL19990141419	19990809
IN214941 B	20080307	IN2001DN00217	20010312
NZ510094 A	20030429	NZ19990510094	19990809
PT1202913 T	20050630	PT19990941966T	19990809
TH23431 B	20080313	TH19991003010	19990811
TH42105 A	20001226	TH19991003010	19990811
US6234337 BA	20010522	US19980134435	19980814
US6386813 BA	20020514	US20010838202	20010420
WO0009406 A1	20000224	WO1999US16708	19990809

Probable Assignee: BIG HEART PET INC

Assignee(s):(std)**:** HEINZ CO H J ; HUBER WILLIAM ; DOUGLAS PETER M ; DEL MONTE CORP

Assignee(s): DEL MONTE CORP SAN FRANCISCO ; HJ HEINZ CO625 LIBERTY AVENUEPITTSBURGHPA15222–3113US ; DEL MONTE CORPONE MARITIME PLAZASAN FRANCISCOCA94111US ; BANK OF AMERICA NA ; BIG HEART PET BRANDS ; BIG HEART PET BRANDS F K A DEL MONTE CORP ; BIG HEART PET BRANDS F K A DEL MONTE CORPORATION ; BIG HEART PET BRANDS LLC ; BIG HEART PET BRANDSONE MARITIME PLAZASAN FRANCISCOCA94111US ; BIG HEART PET INC ; H J HEINZ CO ; DEL MONTE FOODS CO ; JPMORGAN CHASE BANK NA COLLATERAL AGENT AS ; HJ HEINZ CO

Inventor(s):(std)**:** DOUGLAS M ; DOUGLAS P M ; DOUGLAS PETER M ; HUBER W ; HUBER WILLIAM ; PETER M DOUGLAS ; PM DOUGLAS ; W HUBER ; WILLIAM HUBER

Inventor(s): HUBER WILLIAMUS ; P M DOUGLAS ; DOUGLAS PETER MUS ; DOUGLAS PETER H

Agent(s): WWIPPS C O HODGKINSON MCINNES; COHEN HOWARD; OSLER HOSKIN AND HARCOURT LLP; JOHANSSON; REINHOLD COHN AND PARTNERS; BODNER FLOM LAW OFFICES

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZA ZW

International class (IPC 8–9): B21D51/38 B21D51/44 B65D17/34 B65D17/353 B65D17/40 B65D5/54 (Advanced/Invention); B65D17/353 B65D17/40 (Core/Invention)

International class (IPC 1–7): B21D051/44 B21D51/38 B21D51/44 B65D017/34 B65D1/12 B65D17/34 B65D17/353 B65D17/40 B65D17/43 B65D51/38

CPC: B21D51/383 B65D17/163 B65D17/24

European class: B21D51/38B B65D17/16B1 B65D17/24

US class: 220/273 220/276 413/12

Classification Explorer

Cited documents: US5738237 A, US5174706 A, US5169017 A, US5145086 A, US5105977 A, US5069356 A, US5038956 A, US4848623 A, US4804106 A, US4803136 A, US4535909 A, US4534909 A, US4511299 A, US4406378 A, US4386713 A, US4106633 A, US4052949 A, US3986632 A, US3941277 A, US3838788 A, US3696961 A, FR2281878 A1,

Forward Citations: WO10020375, WO08034801, WO08012014, WO06112923, WO03068615, WO03039785, US9540137, US9511411, US9371152, US8973780, US8931660, US8875936, US8727169, US8534485, US8505765, US8328492, US8313004, US8235244, US8205477, US8104319, US8052005, US8011527, US7938290, US7871230, US7743635, US7644833, US7556168, US7350392, US7174762, US7004345, US6772900, US2012292329, US2012125933, US2010126994, US2009269169, US2009266824, US2009180999, US2009120943, US2008257900, US2008050207, US2006237459, US2006096994, US2006071005, US2006060582, US2005082292, US2005082291, US2005006388, US2004200838, US2004065663, US2003042258, US2003001788, KR101179303, JP2010105689, EP2157023, EP1882640, EP1795278, EP1795278, EP1474338, EP1336570, EP1308226, CN104859885, CN102171106, AU2008287051, AU2008287051, AU2007278520,

Abstract:
Source: US6234337B A safe container end closure includes an annular central lid portion, an annular peripheral lid portion, and a score line joining the annular central lid portion to the annular peripheral lid portion to permit removal of the central lid portion from the peripheral lid portion. A opening tab is secured to the central lid portion for pivoting movement relative to the central lid portion, with the opening tab having a nose positioned adjacent the score line so that upon pivoting of the opening tab the nose of the opening tab causes a portion of the score line to sever. The closure is formed so that upon removal of the central lid portion, at least the sharp edge on the removed central lid portion is rendered safe. The central lid portion thus includes an outwardly opening intermediate fold and an inwardly opening bottom fold, with the bottom fold extending radially outwardly beyond the score line so that when the central lid portion is separated from the peripheral lid portion at the score line the severed edge on the central lid portion is positioned radially inwardly of the radially outermost portion of the bottom fold. In addition, The score line is in the form of a V–shaped groove having a rounded nose that provides a variety of advantages. The closure also includes a nose spread below the score line defining the extent to which the severed edge of the central lid portion can move. The nose spread in the area of the nose of the opening tab is greater than at other areas along the circumferential extent of the central lid portion.

0) US2012031056A – CONTAINER END CLOSURE WITH OPTIONAL SECONDARY V...

18) Family number: 50609953 (US2012031056A) © PatBase

Title: CONTAINER END CLOSURE WITH OPTIONAL SECONDARY VENT OPENING

Priority: EP20110815019 20110722 US20100851979 20100806 US20130066457 20131029 US20150812146 20150729 US20140039020P 20140819 US20150829887 20150819 WO2011US44940 20110722 WO2015US45839 20150819

Family:

Publication number	Publication date	Application number	Application date
AU2011286291 AA	20120209	AU20110286291	20110722
AU2011286291 BB	20140417	AU20110286291	20110722
BR112013002863 A2	20160607	BR20131102863	20110722
CA2806879 AA	20130128	CA20112806879	20110722
CA2806879 C	20150428	CA20112806879	20110722
CA2958649 AA	20170217	CA20152958649	20150819
CN103140423 A	20130605	CN201180046744	20110722
CN103140423 B	20150826	CN201180046744	20110722
DE602011031540 D1	20161201	DE201160031540T	20110722
DK2601109 T3	20170109	DK20110815019T	20110722
EP2601109 A1	20130612	EP20110815019	20110722
EP2601109 A4	20140430	EP20110815019	20110722
EP2601109 B1	20161019	EP20110815019	20110722
ES2601810 T3	20170216	ES20110815019T	20110722
MX2013001492 A1	20130501	MX20130001492	20110722
MX337754 B	20160317	MX20130001492	20110722
PL2601109 T3	20170331	PL20110815019T	20110722
RU2013109931 A	20140920	RU20130109931	20110722
RU2573284 C2	20160120	RU20130109931	20110722
US2012031056 AA	20120209	US20100851979	20100806
US2014096491 AA	20140410	US20130066457	20131029
US2015329238 AA	20151119	US20150812146	20150729
US2016052667 AA	20160225	US20150829887	20150819
US8567158 BB	20131029	US20100851979	20100806
US9446879 BB	20160920	US20130066457	20131029
WO12018549 A1	20120209	WO2011US44940	20110722
WO16028860 A1	20160225	WO2015US45839	20150819
WO17019269 A1	20170202	WO2016US41243	20160707

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP ; BOL CORP ; CHASTEEN HOWARD C ; JACOBER MARK A

Assignee(s): GATEWOOD ERIK E ; BALL BROOMFIELD CORP ; BOL KORPOREJSHN

Inventor(s):(std)**:** CHESTIN KHOVARD K ; DZHEKOBER MARK A ; GATEWOOD ERIK E ; JACOBER MARK ; JACOBER MARK A ; CHASTEEN HOWARD ; CHASTEEN HOWARD C

Inventor(s): CHASTEEN HOWARD C WESTMINSTER ; JACOBER MARK A ARVADA ; MARK A JACOBER ; HOWARD C CHASTEEN

Agent(s): MADDERNS PATENT AND TRADE MARK ATTORNEYS; GOODWIN MCKAY; GOODWIN LAW; PARLEE MCLAWS LLP; SMART AND BIGGAR; HANNKE BITTNER AND PARTNER PATENT U RECHTSANWAELTE MBB; HANNKE CHRISTIAN; ISERN JORGE; SHERIDAN ROSS PC; KUGLER BRUCE A; KUGLER BRUCE A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE

GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65B43/39 B65B69/00 B65D17/00 B65D17/34 B65D25/00 B65D47/04 B65D47/32 B65D51/16 B67B7/00 (Advanced/Invention); B65D51/16 (Advanced/Non–invention)

CPC: B65D47/32 B65B69/00 B65D17/165 B65D2517/0014 B65D2517/002 B65D2517/0094 B65D2517/0007 B65D2517/0082 B65D2517/0089 B65D2517/0092 B65D17/24

European class: B65D17/16B2 L65D517/00Y2C L65D517/00Y2Z L65D517/00Y7B1 L65D517/00Y8B

US class: 1/1 220/229 220/269 220/269S 220/272 53/381.1 53/382.1 53/492 53/492P

Classification Explorer

Cited documents: WO9742088, WO9722531, WO9602432 A1, WO9413544, WO14150180 A1, WO13102595, WO13102594, WO12143322, WO12018549, WO11053776, WO08057207, WO08023983, WO08008892, WO0146025 A1, WO0056613, USRE30349 E, USRE28910 E, USD704555, USD691039, USD653944 S1, USD653538, USD650278, USD650277, USD650276, USD623963, USD612724, USD602776, USD600116, USD579771, USD559680 S1, USD535561, USD476889, USD448666, USD434983 S1, USD424438, USD415026, USD402887 S1, USD397296, USD396635, USD387987, USD385192 S1, USD382481, USD365274 S1, USD353769 S1, USD267633 S1, USD259403 S1, USD255425 S1, USD255424 S1, USD239256 S1, USD239255 S1, USD238659 S1, USD238150 S1, USD208591 S1, US9561888 BB, US9233784 BB, US9033174, US8998015, US8950619, US8939306, US8893913, US8646643, US8627979, US8573432, US8567158 BB, US8397935, US8336726, US8245866 BB, US8177092, US8152016, US8136689, US7975884 BB, US7918359, US7891519, US7748557 BB, US7516869, US7513383 BB, US7506779 BB, US7100789 BB, US7096759 BB, US7000797 BB, US6837093 BB, US6761281 BB, US6715629 BB, US6499329 BA, US6375029 BB, US6354453 BA, US6330954, US6202880, US6161717, US6145866 A, US6131763, US6079583 A, US6059137, US6050440, US6024239 A, US5979697 A, US5975327 A, US5964366, US5938390 A, US5911331 A, US5860553 A, US5819973, US5715964, US5713481 A, US5711448 A, US5695085, US5692636 A, US5683006 A, US5655678 A, US5653355, US5555992 A, US5494184, US5456378 A, US5405039 A, US5397014 A, US5375729 A, US5307947 A, US5285919 A, US5248053 A, US5224618 A, US5219257 A, US5131555 A, US5129541 A, US5065882 A, US5064087 A, US5011037 A, US5007554 A, US4994009 A, US4930658 A, US4901880 A, US4701090 A, US4576306 A, US4465204 A, US4448325 A, US4438865 A, US4416389 A, US4402421 A, US4397403 A, US4361251 A, US4320850 A, US4318494 A, US4305523 A, US4289251 A, US4280427 A, US4276993 A, US4267938 A, US4257529 A, US4252247 A, US4244490 A, US4244489 A, US4213538 A, US4210257 A, US4205760 A, US4196823 A, US4184607 A, US4148410 A, US4146149 A, US4128186 A, US4105133 A, US4084721 A, US4073403 A, US4062471 A, US4061243 A, US4054228 A, US4051976 A, US4039100 A, US4032034 A, US4030631 A, US4024981 A, US3982657 A, US3970212 A, US3908856 A, US3881630 A, US3877604 A, US3856184 A, US3836038 A, US3833144 A, US3826401 A, US3794206 A, US3779417 A, US3765208 A, US3762597 A, US3744667 A, US3741432 A, US3731836 A, US3618815 A, US3499573 A, US3446389 A, US3441169 A, US3370169 A, US3362569 A, US3326406 A, US3307737 A, US3262611 A, US3246791 A, US3227304 A, US3215305 A, US3169678 A, US2272111 A, US2160429 A, US2016052667 AA, US2015367984 AA, US2015329238 AA, US2015158627, US2015136776, US2015053681, US2015034648, US2014374419, US2014367382, US2014325943, US2014263333, US2014263327, US2014158685, US2014110408, US2014103044, US2014096491 AA, US2014069924, US2014054332, US2014054290, US2013299496, US2013292382, US2013270269, US2013270267, US2013264344, US2013264343 AA, US2013126529 AA, US2013118133 AA, US2013075401, US2013037543, US2013037542, US2012312815, US2012260613, US2012228296, US2012205378, US2012199587, US2012199586 AA, US2012048870 AA, US2012031056 AA, US2012012584, US2011303672, US2011297679, US2011266281 AA, US2011253719 AA, US2011240645, US2011226636, US2011168714, US2011108552, US2011056946 AA, US2010326281, US2010294771 AA, US2010251731, US2010224511, US2010044383 AA, US2010018976, US2010000997, US2009269169, US2009266824, US2009206083 AA, US2009200305 AA, US2009194536, US2009173740, US2009057315 AA, US2009039091, US2009039090, US2009001081, US2008302793, US2008110888, US2008011786 AA, US2007257035, US2007215621, US2007175896, US2007138178 AA, US2007068943, US2007045318 AA, US2007039961, US2006196875, US2006049196, US2005224497, US2005115976, US2005077316 AA, US2004211786, US2004188440, US2004144787 AA, US2004140309, US2004056032, US2003192889 AA, US2003111469 AA, US2003098306 AA, US2003075544, US2003038134 AA,

US2002139800 AA, US2002113069 AA, US2002005408 AA, US1847794 A, NL1023297 C1, NL1023297 A, KR20050059718 A, JP9301364, JP9058681, JP8151043, JP7132937, JP7132936, JP6219448, JP5178345, JP4879759, JP4311452, JP3578797, JP3009188 U, JP2013531590, JP2010215291, JP2009543737, JP2007022541, JP2006069605, JP2005088961, JP2004359339, JP2003285837, JP2001018960, JP10245032, JP10035662, GB2320008, GB2291030, GB2280165 A1, GB2280165, GB1532081, GB1436617, ES2525589, ES2458098, EP2038178, CN201343207 Y, CA2657391, CA2280461 AA,

Forward Citations: WO17019269, WO16028860, WO14150180, WO14149768, WO14031926, WO14031926, USD787952, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD698668, US9446879, US9403628, US9233784, US9181007, US9162795, US9102451, US8893913, US8875926, US2017029165, US2015053681, US2014054290, US2013240535, EP2888173, CN105745156, CN105102332, CN104703886, CN104684813,

Abstract:
Source: US2012031056A The present invention relates to an opening device for a beverage container. More specifically, the invention relates to a metal end closure having a primary opening area and at least one optional secondary vent opening which can be opened with the same pull tab. The primary opening area of the metal end closure may be opened by utilizing a pull tab interconnected to a central panel, the pull tab being adapted for applying a downward force to form a first opening. Subsequently, the pull tab is rotated and the tail end lifted to form a second opening in the end closure.

19) Family number: 63512295 (WO16139274A1) © PatBase

Title: RELIABLE OPENING CAN END FOR RECLOSING CAN

Priority: GB20150014913 20150821 WO2015EP54328 20150302

Family:

Publication number	Publication date	Application number	Application date
WO16138933 A1	20160909	WO2015EP54328	20150302
WO16139274 A1	20160909	WO2016EP54471	20160302

Probable Assignee: E V D S BVBA

Assignee(s):(std)**:** E V D S BVBA

Assignee(s): EVDS BVBA

Inventor(s):(std)**:** VANDERSTRAETEN ERWIN

Agent(s): IPLODGE BVBA

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 (Advanced/Invention)

CPC: B65D17/166 B65D2517/0046 B65D2517/507

Classification Explorer

Cited documents: WO15004965 A1, WO14200098 A1, WO14124992 A1, WO12028694 A1, US3221923 A, US2015008221 AA, US2007131693 AA,

Abstract:
A can end (2) is described for a metal beverage can, the can end including a cap top (3), arranged in connection to a pull tab (4) configured to remove the cap top from the can end along a pre–defined groove (9), to thereby create a drinking or pouring aperture; and a shut–off valve (6), configured to seal the drinking or pouring aperture after drinking or pouring; wherein the cap top (3) is configured to remain located, after the removal, on top of the shut–off valve (6); and wherein the pre–defined groove (9) includes a stop (21,24) for arresting, in a pre–defined location (25) of the pre–defined groove, propagation of a tear along the pre–defined groove during the removal, wherein the stop includes an abrupt change of direction (21) or an endpoint (24) of the pre–defined groove. The can may be configured for containing a carbonated drink. Further, a can including such a can end and a method for opening such a can are described, as well as a method for producing such a can.

0) US2010065568A – SMALL DIAMETER CAN END WITH LARGE OPENING

20) Family number: 20713865 (US2010065568A) © PatBase

Title: SMALL DIAMETER CAN END WITH LARGE OPENING

Priority: EP19990956190 19991124 GB19980026602 19981204 US20010857145 20010531 US20090564739 20090922 JP20000586598 19991124 US19990857145 19991124 US20120478523 20120523 WO1999GB03899 19991124

Family:

Publication number	Publication date	Application number	Application date
AT221492 E	20020815	AT19990956190T	19991124
AU200012835 A1	20000626	AU20000012835	19991124
AU200012835 A5	20000626	AU20000012835	19991124
AU762618 B2	20030703	AU20000012835	19991124
BRPI9915892 A	20010821	BR1999PI15892	19991124
CA2352764 AA	20010531	CA19992352764	19991124
CA2352764 C	20071120	CA19992352764	19991124
CN1094869 C	20021127	CN19998014100	19991124
CN1329559 A	20020102	CN19998014100	19991124
DE69902404 D1	20020905	DE19996002404	19991124
DE69902404 T2	20021114	DE19996002404T	19991124
DE69902404 T3	20120628	DE19996002404T	19991124
DK1135300 T3	20021028	DK19990956190T	19991124
DK1135300 T4	20120312	DK19990956190T	19991124
EP1135300 A1	20010926	EP19990956190	19991124
EP1135300 B1	20020731	EP19990956190	19991124
EP1135300 B2	20120201	EP19990956190	19991124
ES2179685 T3	20030116	ES19990956190T	19991124
ES2179685 T5	20120328	ES19990956190T	19991124
GB9826602 A0	19990127	GB19980026602	19981204
JP2002531345 T2	20020924	JP20000586598T	19991124
JP2010241508 A2	20101028	JP20100130470	20100520
JP4689832 B2	20110525	JP20000586598T	19991124
KR100632450 B1	20061009	KR20017006997	19991124
KR20010101127 A	20011114	KR20017006997	20010604
MXPA01005571 A1	20020424	MX2001PA05571	19991124
MY121819 A	20060228	MY19990005188	19991127
PL198788 B1	20080731	PL19990348032	19991124
PL348032 A1	20020506	PL19990348032	19991124
PT1135300 T	20021129	PT19990956190T	19991124
TH24009 B	20080704	TH19991004492	19991130
TH42426 A	20010110	TH19991004492	19991130
US2010065568 AA	20100318	US20090564739	20090922
US2012228296 AA	20120913	US20120478523	20120523
US7594585 BA	20090929	US19990857145	19991124
US8196767 BB	20120612	US20090564739	20090922
VN3984 A1	20040126	VN20010000503	20010601
WO0034137 A1	20000615	WO1999GB03899	19991124
ZA200104181 A	20020822	ZA20010004181	20010522

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std): CROWN CORK AND SEAL TECH CORP ; CROWN CORK AND SEAL TECHNOLOGI ; CROWN CORK AND SEAL TECHNOLOGIES CORP ; CROWN PACKAGING TECHNOLOGY INC ; METAL BOX PLC ; FIELDS BRIAN ; GROWN CORK AND SEAL TECHNOLOGIES ; GROWN CORK AND SEAL TECHNOLOGIES CORP

Assignee(s): DEUTSCHE BANK NEW YORK BRANCH AGENT AG AS ; DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; CARNAUDMETALBOX PLC ; CITICORP NORTH AMERICA INC ; CITICORP NORTH AMERICA INC COLLATERAL AGENT AS ; DEUTSCHE BANK AG ; CROWN CORK AND SEAL TECHNOLOGIES ; CROWN CORK AND SEAL TECHNOLOGIES CO ; CROWN CORK AND SEAL TECHNOLOGIES CO ALSIP

Inventor(s):(std): B FIELDS ; BRIAN FIELDS ; FIELDS B ; FIELDS BRIAN

Agent(s): DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; FETHERSTONHAUGH AND CO; HOFFMANN EITLE; DE ELZABURU ALBERTO; WOODCOCK WASHBURN LLP

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

International class (IPC 8–9): B65D17/32 B65D17/34 G09F9/40 (Advanced/Invention); B65D17/32 (Advanced/Non–invention); B21D51/32 B65D17/28 B65D17/32 G09F9/40 (Core/Invention); B65D (Subclass/Invention)

International class (IPC 1–7): B21D51/32 B65D B65D 17/32 B65D17/32 B65D17/34

CPC: Y10S220/906 B65D17/165 B65D2517/0014 B65D2517/0062 B65D2517/0071 B65D2517/5097

European class: B65D17/16B2 L65D517/00Y2C L65D517/00Y7A1A L65D517/00Y7B2 L65D517/50X1

US class: 220/269 220/906

Classification Explorer

Cited documents: WO9822356 A1, WO9730902 A1, WO9729960 A2, WO9637414 A1, USD448666 S1, USD411107 S1, USD387987 S1, USD387666 S1, USD243833 S1, USD218961 S1, US8196767 BB, US7594585 BA, US6330954 BA, US6234336 BA, US6065634 A, US6024239 A, US5964366 A, US5924239 A, US5875911 A, US5813811 A, US5715964 A, US5711448 A, US4465204 A, US4105134 A, US4084721 A, JP8268429 A2, JP8268429, JP3284931 B2, JP11255236, JP10035684, GB1540229 A, EP0432659 A1, DE2553835 A1,

Forward Citations: WO11053776, WO09095672, USD762114, USD750488, USD749415, USD727725, USD715144, USD650278, USD650277, USD650276, US9561888, US9446879, US9403628, US9254945, US9233784, US9162795, US9051081, US9033174, US8950619, US8678221, US8627979, US8196767, US2014054332, US2013043248, US2012228296, US2010065568, JP5917934, JP2013166569, EP2557051, EP2085319, CN104837733, CN102951343,

Abstract:
Source: US2010065568A A can end having a small diameter centre panel and an opening of particular aspect ratio to improve the pourability and drinkability characteristics of the opening, compared to can ends having conventional openings.

0) ZA9808950A – CAN END

21) Family number: 11037902 (ZA9808950A) © PatBase

Title: CAN END

Priority: GB19970020804 19971001 WO1998GB02945 19981001

Family:

Publication number	Publication date	Application number	Application date
AU199892739 A1	19990423	AU19980092739	19981001
AU743636 B2	20020131	AU19980092739	19981001
CA2305578 AA	20000331	CA19982305578	19981001
EP1019294 A1	20000719	EP19980945410	19981001
GB9720804 A0	19971203	GB19970020804	19971001
IN01757CA1998 A	20160902	IN1998CA01757	19981005
WO9916677 A1	19990408	WO1998GB02945	19981001
ZA9808950 A	19990526	ZA19980008950	19981001

Probable Assignee: SPURCOURT LTD

Assignee(s):(std)**:** CALLEWAERT GEORGE ; CALLEWAERT GEORGE LEO ; SPURCOURT LTD

Assignee(s): SPURCOURT LIMITED

Inventor(s):(std)**:** CALLEWAERT GEORGE ; CALLEWAERT GEORGE LEO

Inventor(s): GEORGE LEO CALLEWAERT

Agent(s): HALFORDS IP; GOWLING LAFLEUR HENDERSON LLP

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZW

International class (IPC 8–9): B65D17/32 B65D5/00 B65D51/18 (Advanced/Invention); B65D17/28 B65D51/18 (Core/Invention)

International class (IPC 1–7): B65D17/00 B65D17/32 B65D51/18 B65D55/00 B65D83/00

CPC: B65D17/165 B65D51/185 B65D2251/0031 B65D2251/0071 B65D2517/0098

European class: B65D17/16B2 B65D51/18B L65D251/00Y2M L65D251/00Y6A L65D517/00Y9

Classification Explorer

Cited documents: WO9624539 A1, WO9616871 A1, WO9528328 A1, US5647497 A, US3362572 A, GB2294445 A1, GB2156772 A1,

Forward Citations: EP1036740, DE102015009702,

Abstract:
A can end comprising: a) a disc–shaped panel (2) having a peripheral edge to be engaged with a rim of a can body, the panel having a frangible area; and b) a stay–on type lift tab (3) provided on the panel (2) and having a pull–up end and an opposed end arranged to bear on the frangible area; and c) a seal member (20) attached to the panel, the attachment (22) being between the frangible area and the peripheral edge such that the seal member (20) covers the frangible area and the lift tab (3).

0) US2016039563A – BEVERAGE CAN END HAVING AN ASYMMETRICAL OPENING...

22) Family number: 57468128 (US2016039563A) © PatBase

Title: BEVERAGE CAN END HAVING AN ASYMMETRICAL OPENING

Priority: US20130781480P 20130314 US20140776246 20140314 WO2014US27103 20140314

Family:

Publication number	Publication date	Application number	Application date
CA2905459 AA	20150910	CA20142905459	20140314
CN105873829 A	20160817	CN201480028149	20140314
EP2969796 A1	20160120	EP20140722866	20140314
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TH159438 A	20170118	TH20151005230	20140314
US2016039563 AA	20160211	US20140776246	20140314
WO14152235 A1	20140925	WO2014US27103	20140314

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CLAYDON PAUL CHARLES ; CROWN PACKAGING TECHNOLOGY INC

Assignee(s): DUNWOODY PAUL ROBERT ; RAMSEY CHRISTOPHER PAUL ; CHANT GARRY RICHARD

Inventor(s):(std)**:** CHANT GARRY RICHARD ; CLAYDON PAUL CHARLES ; DUNWOODY PAUL ROBERT ; RAMSEY CHRISTOPHER PAUL

Inventor(s): PAUL ROBERT DUNWOODY ; CHRISTOPHER PAUL RAMSEY

Agent(s): GOWLING LAFLEUR HENDERSON LLP; LIND ROBERT; INO SARI; NISHIJIMA TAKAKI; MATSUSHITA MITSURU; KURASAWA ICHIRO; DESHIMARU TAKESHI; FULLMER HAROLD H

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/32 (Advanced/Invention); B65D17/00 (Core/Invention)

CPC: B65D2517/0013 B65D2517/0059 B65D17/165 B65D1/165

US class: 220/269

Classification Explorer

Cited documents: WO11053776 A1, WO0069735 A1, US2013037542 AA, US2011272406 AA, US2009200306 AA, US2004099664 AA, US2004056032 AA, DE8915716 U, CN1681711 A, CN1308584 A,

Forward Citations: USD787952,

Abstract:
Source: US2016039563A A beverage can end for pressurized contents includes a score that defines a pair of The lobes have longitudinal axes that are not mutually parallel and in some embodiments substantially perpendicular to improve flow.

23) Family number: 30142097 (US2002002975A) © PatBase

Title: APPARATUS AND METHODS FOR THE DELIVERY OF MEDICAMENTS TO THE RESPIRATORY SYSTEM

Priority:

CA20012409722	20010504	CA20012653847	20010504	CA20092409722	20090311
EP20030702161	20030115	US20010344484P	20011101	US20010849194	20010504
US20010812987	20010320	JP20030559583	20030115	US20010812755	20010320
JP20100182645	20030115	JP20030559584	20030115	EP20030729690	20030115
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US20050090328	20050324	WO2006US10278	20060322	US20070654212	20070116
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US20090583256	20090817	WO2001IE00060	20010504	WO2003US01515	20030115
WO2002US08379	20020319	WO2000IE00051	20000505	US20060326593	20060104
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Family:

Publication number	Publication date	Application number	Application date
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AU2006227168 BB	20120426	AU20060227168	20060322
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US8336545 BB	20121225	US20070654212	20070116	
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WO02074374 C2	20021227	WO2002US08380	20020319	
WO03059423 A1	20030724	WO2003US01515	20030115	
WO03059424 A1	20030724	WO2003US01516	20030115	
WO06102345 A2	20060928	WO2006US10278	20060322	
WO06102345 A3	20070125	WO2006US10278	20060322	

Probable Assignee: NOVARTIS AG

Assignee(s):(std)**:** AEROGEN IRELAND LTD ; AEROGEN LTD ; BITDINGER RALF ; BRIONES VICTOR ; CORKERY KEVIN J ; POWER JOHN S ; POWER JOHN SYLVESTER ; FINK JAMES B ; POWER JOHN ; IVRI EHUD ; DUNNE PAUL ; O SULLIVAN GAVAN ; MORAN DECLAN ; NOVARTIS PHARMA AG ; NOVARTIS AG ; GIBBONS KEITH ; SMITH NIALL ; AEROGEN INC

Assignee(s): AEROGEN IRELAND LIMITED ; SF CAPITAL PARTNERS LTD ; RAPP DAVID ; KLIMOWICZ MICHAEL ; POYNTER RICHARD Q ; LOEFFLER JOSEPH P ; NEKTAR THERAPEUTICS

Inventor(s):(std)**:** GIBBONS KEITH ; IVRI EHUD ; JAMES B FINK ; JOHN POWER ; JOHN SYLVESTER POWER ; KLIMOWICZ MICHAEL ; KLIMOWICZ MICHAEL A ; LOEFFLER JOSEPH P ; MICHAEL KLIMOWICZ ; MORAN DECLAN ; NIALL SMITH ; O SULLIVAN GAVAN ; POWER JOHN ; POWER JOHN S ; POWER JOHN SYLVESTER ; BITDINGER RALF ; BRIONES VICTOR ; CORKERY KEVIN J ; DUNNE PAUL ; FINK JAMES B ; POYNTER RICHARD Q ; RAPP DAVID ; REGAN DESMOND ; SMITH NIALL ; SMITH NIALI ; PAUL DUNNE ; FINK JAMES ; EHUD IVRI ; DECLAN MORAN ; KEITH GIBBONS

Inventor(s): JAMES FINK ; CORKERY KEVIN ; O'SULLIVAN GAVAN ; FINK JAMES B SAN MATEO ; GAVAN O SULLIVAN ; POYNTER RICHARD ; KLIMOWICZ MICHAEL LOS ALTOS ; LOEFFLER JOSEPH

Agent(s): PHILLIPS ORMONDE FITZPATRICK; GRIFFITH HACK; FETHERSTONHAUGH AND CO; GOWLING LAFLEUR HENDERSON LLP; EVENS PAUL JONATHAN; VALLEJO JUAN PEDRO; CARVAJAL Y ISABEL; WOLFF BREGMAN AND GOLLER; TOWNSEND AND TOWNSEND AND CREW LLP; NEKTAR THERAPEUTICS; NOVARTIS,CORPORATE INTELLECTUAL PROPERTY; NOVARTIS CORPORATE INTELLECTUAL PROPERTY; MICHAEL J; KILPATRICK TOWNSEND AND STOCKTON LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A61J1/06 A61K A61K31/557 A61K31/57 A61K31/7036 A61K45/00 A61K47/02 A61K47/04 A61K9/12 A61K9/72 A61M11/00 A61M11/02 A61M11/06 A61M15/00 A61M16/00 A61M16/01 A61M16/08 A61M16/10 A61M16/20 A61P11/00 A61P31/04 A61P31/10 A61P31/12 A61P33/02 A62B7/00 B05B11/00 B05B17/06 B05B7/24 B05B7/26 B05B7/28

B65D1/09 B65D83/04 B65D85/42 (Advanced/Invention);
A61M16/00 A61M16/04 A61M16/06 B05B15/00 B05B17/06 (Advanced/Non–invention);
A61J1/06 A61K47/02 A61K9/12 A61M11/00 A61M15/00 A61M16/00 A61M16/08 A61M16/10 B05B17/04 B05B7/24 B65D1/09 (Core/Invention);
A61M16/00 A61M16/04 A61M16/06 B05B15/00 (Core/Non–invention);
A61K A61M (Subclass/Invention)

International class (IPC 1–7): A61K47/04 A61K9/12 A61M11/00 A61M11/06 A61M15/00 A61M16/00 A61M16/08 A61M16/10 A62B18/00 A62B7/00 A62B9/00 B05B17/06 B05D7/14 B05D83/06 B65B1/04 B65D1/02

CPC: Y10S206/828 Y10S215/03 A61M15/009 B05B17/0607 A61M15/0031 A61M15/0033 A61M16/1065 A61M15/0028 B05B17/0646 A61J1/065 A61J2205/10 A61J2205/60 A61M2205/6045 A61M2205/6054 B65D1/095 B65D2203/00 A61M15/00 A61M16/00 A61M16/04 A61M16/06 A61M2016/0021 A61M2016/0024 A61M2205/52 A61M2205/6072 A61M2205/8206 A61M2205/8262 A61M16/20 A61K9/0078 A61K31/7036 A61M11/00 A61M11/005 A61M2016/0027 A61M2205/3561 A61M2205/3569 A61M16/0858 A61M15/0085 A61M2209/082 A61M16/0833

European class: A61J1/06C A61K31/7036 A61M11/00F A61M15/00 A61M15/00C A61M15/00F A61M15/00P A61M16/08 A61M16/20 B05B17/06B5F B65D1/09D K61J205/10 K61J205/60 K61K9/00M20B K61K9/00M20B5 K61M11/00 K61M15/00C1B K61M15/00C1P K61M15/00F K61M16/00 K61M16/00A10 K61M16/00A11 K61M16/00A12 K61M16/00A8B2 K61M16/00A8B4 K61M16/04 K61M16/06 K61M16/10F2A K61M205/35R2 K61M205/35R3 K61M205/52 K61M205/60H K61M205/60M K61M205/60P2 K61M205/82B K61M205/82E K61M209/08A L05B17/06B L65D203/00

US class: 128/200.11 128/200.14 128/200.140P 128/200.140S 128/200.16 128/200.160P 128/200.160S 128/200.17 128/200.18 128/200.21 128/200.22 128/200.220S 128/200.23 128/200.230P 128/200.24 128/200.240P 128/203.12 128/203.13 128/203.15 128/203.21 128/204.18 128/204.21 128/204.22 128/204.23 128/204.26 141/18 206/528 206/530 206/531 206/532 206/828 215/382 215/47 215/47S 215/49 215/DIG.3 222/541.1 239/102.2 239/302 239/317 239/332 239/338 514/34 514/37 514/41 D24/115 D24/115S

Classification Explorer

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Abstract:
Source: US2002002975A An apparatus for delivery of a medicament to the respiratory system comprises a reservoir that is adapted to hold a liquid medicament that is to be delivered to a respiratory system. An aerosol generator is provided that is adapted to aerosolize the liquid medicament. A liquid supplier is used to deliver the liquid medicament from the reservoir to the aerosol generator. A connector is operably coupled to the aerosol generator and comprises a gas conduit having an inlet, and an outlet, and an aerosol supply conduit. The aerosol generator is configured to provide the aerosolized liquid medicament into the gas conduit through the aerosol supply conduit, and the gas conduit is adapted to pass gases to entrain the aerosolized liquid medicament.

0) US4137246A – FLUORINATED AROMATIC POLYENES

24) Family number: 31135280 (US4137246A) © PatBase

Title: Fluorinated aromatic polyenes

Priority:

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Family:

Publication number	Publication date	Application number	Application date
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DE3736513 A1	19880601	DE19873736513	19871028
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FR2331331 B1	19790629	FR19760034154	19761112
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GB2197610 B2	19910731	GB19870026760	19871116
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GB2237526 B2	19910724	GB19900026460	19901205
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JP52065239 A2	19770530	JP19760135451	19761112
JP55031090 A2	19800305	JP19790106124	19790822
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NZ191345 A	19840706	NZ19790191345	19790817
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US4375563 A	19830301	US19820363706	19820330	
US4395575 A	19830726	US19820354331	19820303	
US4723882 A	19880209	US19860936466	19861125	
US4799846 A	19890124	US19870121043	19871116	
ZA7904334 A	19800827	ZA19790004334	19790817	

Probable Assignee: F HOFFMANN LA ROCHE AG

Assignee(s):(std)**:** HOFFMANN LA ROCHE ; HOFFMANN LA ROCH CO F AG ; MINSTER MACHINE CO ; MINI MACHINE CO ; SPARAMEDICA AG ; HOFFMANN LA ROCHE LTD ; HOFFMANN LA ROCHE F AND CO AG

Assignee(s): F HOFFMANN LA ROCHE AND CO AG ; HOFFMANN LA ROCHE AND CO F ; HOFFMANN LA ROCHE F ; F HOFFMANN LA ROCHE AND CO AKTIENGESELLSCHAFT ; HOFFMANN LA ROCHE ET CIE SA ; FHOFFMANN LA ROCHE AND CO AG ; HOFFMANN LA ROCHE LIMITED ; HOFFMANN LA8 F ROCHE AND CO A G ; THE MINSTER MACHINE COMPANY ; MINSTER MACHINE CO A CORP OF OHIO ; SPARAMEDICA A G ; PAWSON BEVERLY A ; HOFFMANN LA8 F ROCHE AND CO AG ; MINISTER MACHINE CO ; MINSTER MACHINE THE COMPANY ; THE MINSTER MACHINE CO MINSTER OHIO US ; THE MINSTER MACHINE CO ; HOFFMANN LA ROCHE AND CO AG F ; HOFFMANN LA ROCHE INC ; F HOFFMANN LA ROCHE AND CO AG BASEL CH ; CHAN KA KONG ; EFU HOFUMAN RA ROSHU UNTO CO AG ; F HOFFMANN LA ROCH CO AG ; F HOFFMANN LA ROCHE AG ; F HOFFMANN LA ROCHE AND CO ; F HOFFMANN LA ROCHE AND CO A G

Inventor(s):(std)**:** PAWSON BA ; KA KONG CHAN ET BEVERLY ANN PAWSON ; WISSMAN TERRY L ; SCHOCKMAN ROBERT L ; PAWSON BEVERLY ANN ; PAWSON BEVERLY A ; PAWSON B A ; PAWSON B ; KAAKON CHIYAN ; KAAKON CHAN ; KA KONG CHAN ; CHAN KA KONG ; CHAN K K ; BEVERLY ANN PAWSON ; BEVERLY ANN PANSON ; BEBARII AN POOSON ; BEBARII AN HOOSON ; BEBARII AN BOOSON

Inventor(s): ANN PAWSON BEVERLY ; CHAN KA KONG HOPATCONG N J ; PAWSON BEVERLY ANN MONTCLAIR N J ; L SCHOCKMAN ROBERT ; L WISSMAN TERRY ; ROBERT L SCHOCKMAN ; SCHOCKMAN ROBERT L ST HENRY OHIO US ; TERRY L WISSMAN ; WISSMAN TERRY L NEW BREMEN OHIO US

Agent(s): ARTHUR S CAVE AND CO; GOWLING LAFLEUR HENDERSON LLP; REINHOLD COHN AND PARTNERS

Designated states: AT BE CH DE FR GB IT LU NL SE

International class (IPC 8–9): A61K31/045 A61K31/075 A61K31/085 A61K31/11 A61K31/165 A61K31/19 A61K31/20 A61K31/215 A61K31/22 A61K31/34 A61K31/341 A61K31/35 A61K31/38 A61K31/381 A61K31/445 A61K31/535 A61K31/54 A61P17/00 A61P35/00 B21D51/38 C07C231/00 C07C231/02 C07C233/11 C07C233/65 C07C235/34 C07C235/46 C07C27/00 C07C29/147 C07C33/48 C07C41/00 C07C41/16 C07C41/26 C07C41/48 C07C43/176 C07C43/178 C07C43/20 C07C43/225 C07C43/23 C07C43/315 C07C45/00 C07C45/26 C07C45/29 C07C45/31 C07C45/41 C07C45/45 C07C45/51 C07C47/20 C07C47/24 C07C47/273 C07C47/277 C07C49/255 C07C51/00 C07C57/60 C07C59/58 C07C59/64 C07C67/00 C07C69/025 C07C69/65 C07C69/734 C07D307/12 C07D307/16 C07D307/38 C07D307/42 C07D307/54 C07D309/12 C07D333/06 C07D333/16 C07D333/22 C07D333/24 (Advanced/Invention);
A61K31/045 A61K31/075 A61K31/11 A61K31/165 A61K31/34 A61K31/341 A61K31/38 A61K31/381 A61P35/00 C07C231/00 C07C27/00 C07C41/00 C07C45/00 C07C47/20 C07C51/00 C07C67/00 (Advanced/Non-invention);
A61K31/045 A61K31/075 A61K31/11 A61K31/165 A61K31/185 A61K31/21 A61K31/34 A61K31/341 A61K31/38 A61K31/381 A61P35/00 B21D51/38 C07C231/00 C07C233/00 C07C235/00 C07C27/00 C07C29/00 C07C33/00 C07C41/00 C07C43/00 C07C45/00 C07C47/20 C07C51/00 C07C57/00 C07C59/00 C07C67/00 C07C69/00 C07D307/00 C07D333/00 (Core/Invention)

International class (IPC 1–7): A01N9/24 A61K31/00 A61K31/035 A61K31/045 A61K31/05 A61K31/075 A61K31/08 A61K31/085 A61K31/09 A61K31/11 A61K31/16 A61K31/165 A61K31/19 A61K31/20 A61K31/21 A61K31/215 A61K31/22 A61K31/23 A61K31/325 A61K31/34 A61K31/35 A61K31/38 A61K31/445 A61K31/535 A61K31/54 B21D24/04 B21D51/44 B30B15/04 B30B9/00 C07C103 C07C103/00 C07C103/133 C07C103/175 C07C103/20 C07C103/26 C07C103/58 C07C103/76 C07C121/50 C07C125 C07C177/00 C07C33 C07C33/06 C07C33/10 C07C33/40 C07C33/46 C07C33/48 C07C43 C07C43/02 C07C43/164 C07C43/17 C07C43/176 C07C43/20 C07C43/225 C07C43/23 C07C43/28 C07C47 C07C47/20 C07C47/232 C07C47/238 C07C47/24 C07C47/26 C07C47/263 C07C47/273 C07C47/277 C07C47/48 C07C47/52 C07C47/55 C07C47/56 C07C49/248 C07C49/44 C07C49/84 C07C57 C07C57/42 C07C57/60 C07C59 C07C59/00 C07C59/64 C07C63 C07C63/52 C07C63/60 C07C65/02 C07C67/343 C07C69 C07C69/02 C07C69/025 C07C69/62 C07C69/65 C07C69/734 C07C69/76 C07D295/16 C07D307 C07D307/12 C07D307/16 C07D307/38 C07D307/42 C07D307/46 C07D307/54 C07D309/12 C07D333 C07D333/06 C07D333/16 C07D333/22 C07D333/24 C07F9/54 C09F5/00 C09F7/00 C09F7/06 C11C3/00

CPC: C07C45/26 C07C45/31 C07C49/255 C07D309/12 B21D51/383 C07C45/515 C07C45/68 C07F9/4006 C07F9/4015 C07F9/4056 C07F9/5442 Y10S514/859 Y10S514/863 Y10S514/96 Y10S514/962 C07C41/18 C07C45/29 C07C41/48 C07C45/41 C07C59/58 C07D307/12 C07D307/16 C07D333/16 C07D307/42 C07C29/147 C07C33/483 C07C41/26 C07C43/178 C07C43/225 C07C43/23 C07C45/292 C07C45/298 C07C45/45 C07C47/277 C07C59/64 C07D307/54 C07D333/22 C07D333/24

European class: 124B69/66AB 124B69/66C 124B69/66C4C 124B69/66X 124B69/76 124BC4B3C 124BC5E2C 124BC5E3C 124BD122X122+69/66AB 124BG12B3G2B3K 12Q31A2C B21D51/38B C07C29/147 C07C33/48A C07C41/16 C07C41/26 C07C41/48 C07C43/178 C07C43/225 C07C43/23 C07C43/315 C07C45/26 C07C45/29 C07C45/29C C07C45/29M C07C45/31 C07C45/41 C07C45/45 C07C45/51B6 C07C45/68 C07C47/277 C07C49/255 C07C59/58 C07C59/64 C07D307/12 C07D307/16 C07D307/42 C07D307/54 C07D309/12 C07D333/16 C07D333/22 C07D333/24 C07F9/40A1 C07F9/40A2 C07F9/40A7 C07F9/54A4

US class: 198/803.15 198/803.8 260/347.4 260/404 260/408 413/14 413/62 413/66 514/859 514/863 514/960 514/962 544/176 544/58.4 546/216 546/226 546/301 548/540 549/496 549/497 549/498 549/499 549/76 549/77 549/78 549/79 554/120 554/153 554/157 554/218 554/220 554/62 560/104 560/105 560/174 560/183 560/184 560/185 560/254 560/55 560/60 560/62 562/465 562/472 562/567 562/586 568/308 568/398 568/415 568/425 568/433 568/442 568/484 568/495 568/592 568/649 568/654 568/655 568/663 568/812 568/816 72/31.01 72/361 72/405 72/405.02 72/405.09 72/422

Classification Explorer

Cited documents: US4568230 A, US4546873 A, US4475278 A, US4456873 A, US4216312 A, US4213324 A, US4137246 A, US4105681 A, US4086420 A, US4061656 A, US4054589 A, US4026226 A, US3984440 A, US3954817 A, US3896150 A, US3883508 A, US3862969 A, US3860107 A, US3858432 A, US3840559 A, US3683834 A, US3683665 A, US3657306 A, US3550546 A, US3470837 A, US3366086 A, US3281440 A, US3245370 A, US3231065 A, US3196817 A, US3193565 A, US3177091 A, US3163669 A, GB2178678 A1, GB1468401 A, GB1442108 A, GB1079217 A, FR2223037 A1, DE672965 A, DE2756652 A1, DE2651979 A1, DE2651968 A1, DE2542612 A1, DE2414619 A1, DE2328182 C2, DE124832 A,

Forward Citations: WO8906575, WO14144284, WO14144284, WO05016001, USRE37947, USRE35530, US9550224, US9486421, US9393610, US8777000, US8420698, US8138225, US8026280, US7902259, US7858664, US7842727, US7838463, US7464576, US7370507, US7344347, US7314953, US7312247, US7305861, US7114248, US7107671, US6887030, US6817083, US6808351, US6802683, US6695132, US6533518, US6506917, US6495719, US6405853, US6405430, US6186061, US6070713, US6022179, US5876171, US5705167, US5704754, US5534261, US5511920, US5508456, US5484052, US5344300, US5292885, US5286895, US5282531, US5182934, US5158410, US5151001, US5102278, US5096052, US5017072, US4964325, US4946028, US4936729, US4932822, US4854799, US4806558, US4751027, US4539154, US4476056, US4395575, US4335248, US2015151350, US2013140135, US2011315522, US2010116775, US2008267736, US2008083255, US2008025820, US2006010953, US2005138984, US2005049145, US2004167184, US2004020042, US2003230179, US2003192175, US2003125306, US2003083521, US2003053890, JP62120393, JP2016517353, FR2719041, EP0941830, EP0941779, EP0679628, EP0611060, EP0111124, EP0009539, EP0002533, EA11453, EA011453, DE3321662, DE102007018778, CN103084505,

Abstract:
Source: US4137246A Compounds represented by the formula wherein R1, R2 and R3 are lower alkyl, R4 is lower alkoxy, R6 and R8 are methyl or trifluoro methyl, R9 is formyl, hydroxymethyl, alkoxymethyl, alkanoyloxymethyl,

carboxyl, alkoxycarbonyl, lower alkenoxycarbonyl, lower alkynoxycarbonyl, carbamoyl, mono(lower alkyl)−carbamoyl, di(lower alkyl)carbamoyl or N−heterocyclylcarbonyl, R5, R7, R10, R11 R12 and R13 are hydrogen or fluorine with the proviso that at least one of R5, R7, R10, R11, R12 or R13 is fluorine or at least one of R6 or R8 is trifluoro methyl, OR PHARMACEUTICALLY ACCEPTABLE SALTS THEREOF USEFUL AS ANTITUMOR AGENTS ARE DISCLOSED.

0) US3470837A – APPARATUS FOR FORMING EASY–OPEN CAN ENDS

25) Family number: 884005 (US3470837A) © PatBase

Title: APPARATUS FOR FORMING EASY–OPEN CAN ENDS

Priority: US19670680570 19671103

Family:

Publication number	Publication date	Application number	Application date
US3470837 A	19691007	US19670680570	19671103

Probable Assignee: FRAZE ERMAL C

Assignee(s):(std)**:** FRAZE ERMAL C

Assignee(s): ERMAL C FRAZE

Inventor(s):(std)**:** EICKENHORST FRANKLIN C ; FRAZE ERMAL C

Inventor(s): ERMAL C FRAZE ; FRANKLIN C EICKENHORST

International class (IPC 8–9): B21D51/38 (Advanced/Invention); B21D51/38 (Core/Invention)

International class (IPC 1–7): B21D51/38 B21D51/44

CPC: B21D51/383

European class: B21D51/38B

US class: 413/66

Classification Explorer

Cited documents: US3359935 A, US3346948 A, US3245370 A, US3196817 A,

Forward Citations: USRE33061, US5284045, US4799846, US4723882, US4640116, US4568230, US4125080, US3580200, ITBO20110066, EP0605978, EP0161651, DE3736513, AU575647,

Abstract:
Source: US3470837A ABSTRACT OF THE DISCLOSURE This disclosure describes a machine particularly adapted for Converting can ends into easy–open can ends. The ma– 15 chine as disclosed includes a main dial plate which rotaetes intermittently and which carries several can ends through several work stations at which various work opérations are carried out. This machine embodies numerous concepts which permit it to be easily and rapidly converted to han– 20 die can ends of widely varying size and shape. B

0) EP1190952A2 – CAN HAVING CAN END WALL PROVIDED WITH RECLOSING...

26) Family number: 15876043 (EP1190952A2) © PatBase

Title: Can having can end wall provided with reclosing tab

Priority: EP20010308082 20010924 KR20000056238 20000925 KR20000067226 20001113

Family:

Publication number	Publication date	Application number	Application date
EP1190952 A2	20020327	EP20010308082	20010924
EP1190952 A3	20040107	EP20010308082	20010924
GB200122986 A0	20011114	GB20010022986	20010925
GB2379917 A1	20030326	GB20010022986	20010925
KR100329127 B1	20020321	KR20000067226	20001113
KR20010016144 A	20010305	KR20000067226	20001113

Probable Assignee: LIVEMAX CO LTD

Assignee(s):(std): EU BIOTECH DEV LTD ; LIVEMAX CO LTD

Assignee(s): EU BIOTECH DEVELOPMENT LIMITED ; EU BIOTECH DEVELOPMENT LTD ; LIVEMAX CO

Inventor(s):(std): JUNG JAE JUN ; YOON CHIL SEOK ; YOON CHIL SURK ; CHOUNG JAI JUN

Inventor(s): JAI JUN CHOUNG ; CHIL SURK YOON

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

International class (IPC 8–9): B65D17/28 B65D17/32 B65D17/34 B65D17/50 (Advanced/Invention); B65D17/50 (Advanced/Non–invention)

International class (IPC 1–7): B65D17/16 B65D17/32 B65D17/34 B65D17/50

CPC: B65D17/165 B65D2517/0014 B65D2517/0041 B65D17/161 B65D2517/0011

European class: B65D17/16B2 L65D517/00Y2C L65D517/00Y5D1

Classification Explorer

Cited documents: WO9854058 A1, WO9424006 A1, US5292022 A, US5186348 A, US4880137 A, US4685849 A, US4463866 A, GB2255081 A1,

Forward Citations: WO13020706, WO12031994, WO12010258, WO10115911, WO10094793, WO09103817, US9272823, US9162796, US8720740, EP2557050, EP2502838, EP2409925, AT507950,

Abstract:
Source: EP1190952A2 Disclosed is a can having a can end wall. The can end wall includes an opening panel portion which is delimited by a score line so as to define a discharge opening upon being depressed downward, an opening tab, a reclosing tab and a rivet. The reclosing tab has substantially a cylindrical configuration which is closed at an upper end thereof and opened at a lower end thereof. The opening tab and the reclosing tab are oppositely arranged to each other and integrally connected with each other to define a tab section. Three tab supporting projections are frusto–conically formed on an upper surface of the can end wall, and a cylindrical wall part is integrally formed with the can end wall in such a way as to be closed at an upper end thereof by the opening panel portion.

0) US5711448A – NON–DETACHABLE TAB CAN END WITH LARGE OVAL OPEN...

27) Family number: 8630747 (US5711448A) © PatBase

Title: Non–detachable tab can end with large oval opening

Priority: CA19952158379 19950915 JP19950262287 19950915 US19940306798 19940915 US19950565289 19951130

Family:

Publication number	Publication date	Application number	Application date
AU199531721 A1	19960328	AU19950031721	19950915
AU705788 B2	19990603	AU19950031721	19950915
BRPI9504036 A	19960924	BR1995PI04036	19950915
CA2158379 AA	19960316	CA19952158379	19950915
CA2158379 C	20010417	CA19952158379	19950915
CL1995001401 A1	19960624	CL19950001401	19950914
CN1058460 C	20001115	CN19951018422	19950915
CN1125679 A	19960703	CN19951018422	19950915
EP0704382 A2	19960403	EP19950114531	19950915
EP0704382 A3	19961002	EP19950114531	19950915
JP11255236 A2	19990921	JP19990015301	19990125
JP2957930 B2	19991006	JP19950262287	19950915
JP8268429 A2	19961015	JP19950262287	19950915
PE6796 A1	19960410	PE19950279140	19950915
RU95115544 A	19970820	RU19950115544	19950912
US5711448 A	19980127	US19950565289	19951130

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BOWL INC ; CLARKE MILTON W ; CLARKE MILTON W III ; REYNOLDS METALS CO

Assignee(s): REYNOLDS METALS COMPANY ; BALL CORP ; REINORUZU METARUSU CO

Inventor(s):(std)**:** CLARKE III MILTON W ; CLARKE MILTON W III ; MIRUTON DABURIYU KURAAKE ZA SA ; MIRUTON DABURYU KURAAKE ZA SAA

Inventor(s): MIRUTON DABURYU KURAAKE ZA SAADO ; MIRUTON DABURIYU KURAAKE ZA SAADO ; MILTON W CLARKE III ; CLARKE MILTON W

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; MARKS AND CLERK; JOHANSSON

Designated states: AT CH DE ES FR GB GR IT LI

International class (IPC 8–9)**:** B21D51/26 B21D51/44 B65D17/28 B65D17/32 B65D17/34 B65D17/347 B65D17/35 B65D17/353 B65D41/32 (Advanced/Invention); B21D51/38 B65D17/28 (Core/Invention)

International class (IPC 1–7)**:** B21D51/44 B65D17/32 B65D17/34 B65D17/347 B65D17/353

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/269 D9/438

Classification Explorer

Cited documents: US5555992 A, US5405039 A, US5375729 A, US5307947 A, US5129541 A, US5129541, US5064087 A, US5011037 A, US5007554 A, US4994009 A, US4930658 A, US4901880 A, US4733793 A, US4673099 A, US4465204 A, US4372462 A, US4367996 A, US4363419 A, US4361251 A, US4320850 A, US4276993 A, US4266688 A, US4219127 A, US4211335 A, US4210257 A, US4184607 A, US4084721 A, US4062471 A, US4061243 A, US4030631 A, US4024981 A, US4015744 A, US3977561 A, US3967752 A, US3853242 A, US3836038 A, US3362569 A, JP6328633 U, JP6280822 U, JP55170238 U, JP5504318, JP49101193, EP0432659 A1,

Forward Citations: WO14150205, WO11026900, WO02051710, WO0056613, WO0034137, USRE42485, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD704555, USD677585, USD677584, USD672663, USD669781, USD663622, USD663210, USD661204, USD661203, USD658078, USD656042, USD653563, USD653562, USD653126, USD653125, USD653124, USD653123, USD652742, USD652741, USD652740, USD651527, USD651526, USD649887, USD649049, USD647400, USD643718, USD641623, USD641622, USD641261, USD641239, USD638311, USD632190, USD632189, USD632188, USD632187, USD631759, USD626015, USD624438, USD621724, USD620377, USD615877, USD614970, USD614969, USD614049, USD612732, USD607727, USD607330, USD607329, USD606406, USD606405, USD606404, USD606403, USD606402, USD599678, USD599677, USD596958, USD596957, USD596956, USD596955, USD596505, USD596504, USD596503, USD596502, USD596501, USD596500, USD588021, USD588020, USD588019, USD588018, USD588017, USD588016, USD507485, USD476889, USD448666, USD424438, US9505540, US9446879, US9254945, US9248936, US9233784, US9216840, US9181007, US9033174, US8950619, US8939308, US8627979, US8567158, US8215513, US8196767, US8141741, US8109406, US7909196, US7594585, US7165696, US7000797, US6889862, US6761281, US6575684, US6405889, US6330954, US6260728, US6234336, US6164480, US6161717, US6112932, US6024239, US5967726, US5964366, US5715964, US2014054332, US2012228296, US2011056945, US2010065568, US2009218349, US2009212004, US2008099480, US2005252917, US2004056032, US2003080132, TWI454411, RU2607175, RU2516138, JP4689832, JP3374747, JP3284931, JP2010241508, JP2003517974, JP2002531345, JP11165733, JP10296362, EP2878547, EP2557051, EP1353852, EP1135300, CN105339278, CN105102332, CN104144858, CN102951343, CN102548855, AU762618,

Abstract:
Source: US5711448A An easy−open, stay−on−tab can end has a circular end wall with a large, substantially oval tear panel defined by a score line and a hinge. A rivet adjacent the tear panel connects a tab to the end wall. The width of the tear panel, as measured perpendicular to the diameter of the end wall, is substantially greater than its length. The opening formed by lifting the rear of the tab and displacing the tear panel downwardly about its hinge provides improved pourability and drinkability of the liquid contents of the can. The area of the tear panel is at least 0.50 in2. The tear panel extends substantially to the center of the end wall and may include an upwardly projecting, closed, predominantly oval bead having a portion generally following the outline of the bight of the score line. The front end of the tab extends over the bead and cooperates with it during opening.

0) US3843012A – EASY OPEN CAN END/AND HINGED OPENING TAB

28) Family number: 1100735 (US3843012A) © PatBase

Title: EASY OPEN CAN END/AND HINGED OPENING TAB

Priority: US19720285745 19720901

Family:

Publication number	Publication date	Application number	Application date
US3843012 A	19741022	US19720285745	19720901

Probable Assignee: ERMAL CO

Assignee(s):(std)**:** ERMAL CO

Assignee(s): ERMAL CO US

Inventor(s):(std)**:** BROWN O

Inventor(s): BROWN O US

International class (IPC 8–9)**:** F16B7/20 (Advanced/Invention); F16B7/00 (Core/Invention)

International class (IPC 1–7)**:** B65D17/20 B65D17/24

CPC: B65D17/163

European class: B65D17/16B1

US class: 215/255 220/269

Classification Explorer

Forward Citations: WO14009195, US5967726, US4108331, US4022346, US2006060582, US2004099665, NL7705102, EP2684808,

Abstract:
Source: US3843012A 1. An easy open can end construction comprising: a tear portion circumscribed by a primary line of weakness; a tab having a body including a nose portion, a lifting end and a support strip; said support strip connected to the tear portion by a front connection positioned adjacent the tab nose and a rearward connection positioned between the front connection and the lifting end. said front and rearward connections lying on about the centerline of the tab with the nose portion of the tab positioned in rupturing proximity to said line of weakness; said support strip defined by a slit in the tab body, with the slit beginning at a point adjacent the front connection, extending rearwardly around the rearward connection and then extending forwardly to end at a point adjacent the front connection with the ending point spaced transversely from the beginning point of the slit and with the beginning and end portions of said slit including tear retarding portions; the beginning and ending of said slit positioned with respect to said front connection to define a tab bend line which lies rearward of the front connection when the lifting end of the tab is raised to rupture the line of weakness through contact with the tab nose, and said rearward connection providing support for said front connection through said support strip during rupturing of the line of weakness.

0) US5785198A – TWIST–OFF CAN END

29) Family number: 15323558 (US5785198A) © PatBase

Title: TWIST–OFF CAN END

Priority: US19950529578 19950918 WO1996US14951 19960918

Family:

Publication number	Publication date	Application number	Application date
AT195480 E	20000915	AT19960933045T	19960918
AU199671612 A1	19970409	AU19960071612	19960918
AU697476 B2	19981008	AU19960071612	19960918
BRPI9610584 A	19990706	BR1996PI10584	19960918
CA2232407 AA	19980316	CA19962232407	19960918
CN1200095 A	19981125	CN19961097735	19960918
DE69609863 D1	20000921	DE19966009863	19960918
DE69609863 T2	20010118	DE19966009863T	19960918
EP0865390 A1	19980923	EP19960933045	19960918
EP0865390 B1	20000816	EP19960933045	19960918
GR3034856 T3	20010228	GR20000402545T	20001115
JP11512686 T2	19991102	JP19970512857T	19960918
KR19990045762 A	19990625	KR19980702006	19980318
RU98107248 A	20000210	RU19980107248	19980418
US5785198 A	19980728	US19950529578	19950918
WO9711005 A1	19970327	WO1996US14951	19960918
ZA9607877 A	19970407	ZA19960007877	19960918

Probable Assignee: COCA COLA CO

Assignee(s):(std)**:** COCA COLA CO

Assignee(s): CREDLE WILLIAM S JR ; THE COCA COLA CO ATLANTA ; THE COCA COLA COMPANY

Inventor(s):(std)**:** CREDLE JR WILLIAM S ; CREDLE S ; CREDLE WILLIAM S ; CREDLE WILLIAM S JR ; JR ; WILLIAM S CREDLE ; WILLIAM S CREDLE JR

Agent(s): PHILLIPS ORMONDE FITZPATRICK; SIM AND MCBURNEY

Designated states: AL AM AT AU AZ BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IL IS IT JP KE KG KP KR KZ LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG UZ VN

International class (IPC 8–9): B65D41/04 B65D41/08 B65D45/30 B65D8/02 (Advanced/Invention); B65D45/30 (Advanced/Non–invention); B65D45/00 B65D8/00 (Core/Invention)

International class (IPC 1–7): B65D B65D41/04 B65D45/30 B65D51/18 B65D8/02

CPC: Y10S220/906 B65D45/305

European class: B65D45/30B

US class: 220/254 220/254.8 220/258.5 220/269 220/304 220/319 220/906

Classification Explorer

Cited documents: WO9301988 A1, US803932 A, US5421473 A, US5341949 A, US5259526 A, US5052576 A, US5052568 A, US4932554 A, US4844270 A, US4782968 A, US4705183 A, US4694970 A, US4408694 A, US4316318 A, US4159061 A, US4111330 A, US4044917 A, US3899096 A, US2562111 A, FR698872 A, FR2563500 A1, FR1565643 A, DE914712 A, DE8701071 U, DE8701071 U, DE3207172 A1,

Forward Citations:

WO9950150, WO16200060, WO16180795, USD747649, USD747199, USD696584, USD682107, USD682106, USD682105, USD682104, USD681459, USD526308, US9637269, US9387959, US9272819, US8985371, US8899091, US8857644, US8844761, US8733576, US8684208, US8678211, US8636161, US8418870, US7014060, US6234338, US6105807, US2013075355, US2011036134, US2011011866, US2010288759, US2010126992, US2010003109, US2009223986, US2008302797, US2008302756, US2006070994, KR101622686, JP2005193980, GB2538236, EP1550617,

Abstract:
Source: US5785198A A twist−off can end assembly includes a cylindrical can body having an open end with a rolled flange extending around an exterior surface of the can body at the open end and a shoulder portion joining the open end with side walls of the cylindrical can. A collar surrounds the exterior surface of the can adjacent the open end, the collar including a can mating finish of an inner surface thereof and a closure engaging finish on an outer surface thereof. The collar is seated against the exterior surface of the open end between the rolled flange and the shoulder portion of the can body. A cylindrical closure is provided having a dependent peripheral skirt for operatively engaging the closure engaging finish of the collar. A lid member is secured to the open end of the cylindrical can body by a lid engaging portion of the cylindrical closure. Because of the arrangement described, rigidity is provided to the lip of the can body, the engaging collar results in a better drinking surface, and the cylindrical closure protects the drinking surface of the engaging collar prior to use thereof. Finally, due to the combination, the can body and can lid are formed of standard parts in a conventional and known manner.

0) US4196823A – EASY–OPENING CAN END

30) Family number: 4906187 (US4196823A) © PatBase

Title: Easy–opening can end

Priority: AU19770002458 19771118 AU19780004564 19780531 AU19780041548 19780531

Family:

Publication number	Publication date	Application number	Application date
AU197841548 A1	19790524	AU19780041548	19771118
GB2008061 A1	19790531	GB19780044976	19781117
JP54079791 A2	19790626	JP19780142147	19781117
US4196823 A	19800408	US19780962791	19781120

Probable Assignee: COMALCO PROD

Assignee(s):(std)**:** COMALCO PROD

Assignee(s): COMALCO PRODUCTS PTY LTD

Inventor(s):(std)**:** MADDEN RAYMOND F ; MADDEN RAYMOND FRANCIS ; MOREAU DENNIS B ; MOREAU DENNIS BARRY ; DENISU BARII MOROO ; REIMONDO FURANSHISU MATSUDEN

Inventor(s): DENNIS BARRY MOREAU ; RAYMOND FRANCIS MADDEN

International class (IPC 8–9): B65D17/32 B65D41/32 (Advanced/Invention); B65D17/28 B65D41/32 (Core/Invention)

International class (IPC 1–7): B65D17/06 B65D17/16 B65D17/24 B65D41/32

CPC: B65D17/161 B65D2205/00

European class: B65D17/16B L65D205/00

US class: 220/268 220/271

Classification Explorer

Cited documents: US4134517 A, US4105134 A, DE2421314 A1,

Forward Citations: USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD691039, US9446879, US9233784, US8567158, US7975884, US5934498, US5535911, US5507419, US5305931, US5285919, US5213238, US4928845, US4802603, US2008011786, US2003213803, EP0032115, EP0024190,

Abstract:
Source: US4196823A An easy–opening can end having a venting aperture and a dispensing aperture each closed by a respective push–in tab, the relationship between the two apertures and the two tabs being such that, should the venting tab close or not be sufficiently opened after depression, depression of the dispensing tab causes the dispensing tab to contact the venting tab to open the latter and to hold it open.

0) US2009261101A – VENTABLE RESEALING CAN END CLOSURE

31) Family number: 43872709 (US2009261101A) © PatBase

Title: VENTABLE RESEALING CAN END CLOSURE

Priority: US20080106877 20080421

Family:

Publication number	Publication date	Application number	Application date
US2009261101 AA	20091022	US20080106877	20080421
US8336728 BB	20121225	US20080106877	20080421
WO09131994 A1	20091029	WO2009US41242	20090421

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** FORREST RANDALL G ; REXAM BEVERAGE CAN CO ; TURNER TIMOTHY L

Assignee(s): REXAM BEVERAGE CAN COMPANY

Inventor(s):(std)**:** FORREST RANDALL G ; TURNER TIMOTHY L

Agent(s): UNGARETTI AND HARRIS LLP,INTELLECTUAL PROPERTY GROUP – PATENTS; UNGARETTI AND HARRIS LLP INTELLECTUAL PROPERTY GROUP PATENTS; UNGARETTI AND HARRIS LLP; KLOBUCHAR PETER M

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/34 B65D17/50 B65D41/06 B65D51/16 B65D53/02 (Advanced/Invention); B65D17/00 B65D17/28 B65D51/16 B65D53/00 (Core/Invention)

CPC: B65D17/506 B65D2205/00 B65D2517/002 B65D2517/0038

European class: B65D17/50B L65D205/00 L65D517/00Y2Z L65D517/00Y5C

US class: 220/203.01 220/203.010S 220/254.8 220/270 220/303 220/304 220/366.1 220/367.1 220/367.100P 220/378 220/906

Classification Explorer

Cited documents: US7171840 BB, US7051896 BB, US6959830 BA, US684799 A, US634742 A, US6193096 BA, US6015054 A, US5704510 A, US5688544 A, US5443175 A, US5322177 A, US5249703 A, US4632271 A, US4202462 A, US4043474 A, US3868038 A, US3844443 A, US3704677 A, US3672547 A, US3477608 A, US3219004 A, US3021976 A, US2908417 A, US2661863 A, US253075 A, US2363693 A, US2337616 A, US2241793 A, US2007062952 AA, US2006011633 AA, US2005029264 AA, US2004159665 AA, US1746926 A, US1598870 A, US1598098 A, GB2180521 A1,

Forward Citations: USD734154, USD725472, USD725471, USD702553, USD697407, USD697404, USD696946, USD696116, USD688949, USD686079, USD686078, US9637269, US9580203, US9550485, US9272819, US9033175, US8985371, US8844761, US2016257290,

Abstract:
Source: US2009261101A A can end for a container has a metallic main portion and a polymeric separable cap. The metallic main portion is positioned about a longitudinal axis and has a curl defining a radially outer perimeter of the can end. A center panel is joined to the curl. A dispensing aperture is in the center panel, and a plurality of projections extend radially inwardly into the dispensing aperture. The polymeric separable cap is in the dispensing aperture and has a plurality of angled channels. The channels have an entry portion opposite a terminal end and a vent region therebetween.

0) US6024239A – END CLOSURE WITH IMPROVED OPENABILITY

32) Family number: 13327904 (US6024239A) © PatBase

Title: End closure with improved openability

Priority: EP19980933003 19980630 US19970887576 19970703 WO1998US13616 19980630

Family:

Publication number	Publication date	Application number	Application date
AT248753 E	20030915	AT19980933003T	19980630
AT320978 E	20060415	AT19980075178T	19980630
AT320979 E	20060415	AT19980005285T	19980630
BRPI9810532 A	20020122	BR1998PI10532	19980630
DE69817825 D1	20031009	DE19986017825	19980630
DE69817825 T2	20040701	DE19986017825T	19980630
DE69833887 D1	20060511	DE19986033887	19980630
DE69833887 T2	20070301	DE19986033887T	19980630
DE69833890 D1	20060511	DE19986033890	19980630
DE69833890 T2	20070222	DE19986033890T	19980630
EP0993408 A2	20000419	EP19980933003	19980630
EP0993408 B1	20030903	EP19980933003	19980630
EP1306310 A2	20030502	EP20030075178	19980630
EP1306310 A3	20030507	EP20030075178	19980630
EP1306310 B1	20060322	EP20030075178	19980630
EP1318077 A1	20030611	EP20030005285	19980630
EP1318077 B1	20060322	EP20030005285	19980630
ES2205515 T3	20040501	ES19980933003T	19980630
ES2260529 T3	20061101	ES20030005285T	19980630
ES2260572 T3	20061101	ES20030075178T	19980630
US6024239 A	20000215	US19970887576	19970703
WO9901351 A2	19990114	WO1998US13616	19980630
WO9901351 A3	19990610	WO1998US13616	19980630

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** AMERICAN NAT CAN CO ; AMERICAN NAT CAN COMPANY ; AMERICAN NATIONAL CAN CO ; REXAM BEVERAGE CAN CO

Assignee(s): REXAM BEVERAGE CAN COMPANY ; REXAM BEVERAGE CAN CO CHICAGO ; AMERICAN NATIONAL CAN COMPANY

Inventor(s):(std)**:** MILES MICHAEL P ; MILES P ; FORREST G ; FORREST RANDALL G ; TURNER L ; TURNER TIMOTHY L

Inventor(s): MICHAEL P MILES ; RANDALL G FORREST ; TIMOTHY L TURNER

Designated states: AT BE BR CH CY DE DK ES FI FR GB GR IE IT LI LU MC MX NL PT SE

International class (IPC 8–9): B65D17/00 B65D17/32 B65D17/34 (Advanced/Invention)

International class (IPC 1–7): B65D17/00 B65D17/32 B65D17/34

CPC: B65D17/165 B65D2517/5091 B65D2517/5097

European class: B65D17/16B2 L65D517/50Q99 L65D517/50X1

US class: 220/269

Classification Explorer

Cited documents:

WO9729960 A2, USRE33217, USRE31702, USD371073, USD365988, USD364807, USD338156, USD327424, USD320153, USD319580, USD318225, USD302116, USD279265, USD275373, USD267393, USD266991, USD265463, USD263803, USD263802, USD244915, US5772060 A, US5715964 A, US5711448 A, US5456378 A, US5405039 A, US5385254 A, US5375729 A, US5307947 A, US5287718 A, US5234123 A, US5199591 A, US5149238 A, US5129541 A, US5119664 A, US5112695 A, US5064087 A, US5011037 A, US4991735 A, US4930658 A, US4930654 A, US4928844 A, US4880136 A, US4872597 A, US4865506 A, US4862722 A, US4832223 A, US4808052 A, US4804104 A, US4796772 A, US4790705 A, US4749100 A, US4735863 A, US4733793 A, US4722215 A, US4716755 A, US4713958 A, US4704887 A, US4641761 A, US4606472 A, US4577774 A, US4571978 A, US4561280 A, US4559801 A, US4549424 A, US4530631 A, US4516420 A, US4465204 A, US4434641 A, US4420283 A, US4387827 A, US4363419 A, US4361251 A, US4305523 A, US4289251 A, US4276993 A, US4266688 A, US4217843 A, US4211335 A, US4210257 A, US4205760 A, US4184607 A, US4175670 A, US4130219 A, US4109599 A, US4084721 A, US4062471 A, US4061243 A, US4031837 A, US4030631 A, US4024981 A, US4015744 A, US3977561 A, US3967752 A, US3957005 A, US33217 A, US3215305 A, US31702 A, JP6024443 A2, JP1308744 A2, GB2193140 A1, GB2067159 A1, GB1604068 A, FR2075934 A1, EP0704382 A2, EP0621195 A2, EP0564725 A1, EP0381888 A1, EP0191271 A2, EP0103074 A2,

Forward Citations: WO15077469, WO14151503, WO14150205, WO13188556, WO13173280, WO13166491, WO13067398, WO11156386, WO07056844, WO04026712, WO03053800, WO03035494, USRE42485, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD691039, USD507485, USD476889, US9580203, US9566634, US9540137, US9446879, US9371152, US9248936, US9233784, US9199763, US9181007, US9033175, US9016034, US8973780, US8950619, US8931660, US8875936, US8733576, US8727169, US8646643, US8627979, US8567158, US8505765, US8454292, US8371467, US8328492, US8328041, US8313004, US8235244, US8205477, US8196767, US8104319, US8052005, US8011527, US7938290, US7909196, US7748563, US7743635, US7644833, US7594585, US7556168, US7350392, US7326346, US7183235, US7174762, US7063793, US7048781, US7004345, US7000797, US6942840, US6935826, US6911570, US6889862, US6877941, US6848875, US6797178, US6772900, US6761281, US6761280, US6736283, US6715629, US2012292329, US2011204055, US2011186575, US2011031256, US2010287886, US2010243663, US2010116374, US2010065568, US2009269169, US2009266824, US2009180999, US2009120943, US2009039091, US2009020543, US2008257900, US2008050207, US2007108208, US2006293170, US2006096994, US2006071005, US2006030476, US2005279678, US2005252917, US2005247717, US2005034651, US2005006388, US2004211786, US2004211780, US2004200838, US2004065663, US2004056032, US2003202862, US2003121924, US2003080132, US2003042258, US2003001788, US2001047956, RU2572770, EP2844573, EP1857196, EP1556287, CN104364164, AU2012332214, AU2002347836,

Abstract:
Source: US6024239A The present invention provides a stay−on−tab end closure having a displaceable tear panel defined by a frangible score with a sloping segment and a non−frangible hinge segment. A curvilinear bead is formed entirely in an exposed area of the central panel formed by a void region of the tab webbing. The nose of the tab has a generally asymmetric shaped outer edge with a second portion extending further over the tear panel toward the curvilinear transition zone of the score. The invention further provides a tab with an asymmetrical thickness, with a thickened portion adjacent the second scoreline segment, and further provides a bead segment positioned under a side portion of the tab nose adjacent the second segment of the score. The present invention also provides an end with a hinge region of the tab adapted to bend at a hinge line, the hinge line intersecting the central longitudinal axis of the tab at an oblique angle. The invention also provides a stepped profile of the panel outer edge with substantially parallel countersink walls and a chuck wall angularly extending from below the panel height.

0) US2016023801A – VENTED BEVERAGE CAN END HAVING AN ANTI–TENSION ...

33) Family number: 57467520 (US2016023801A) © PatBase

Title: VENTED BEVERAGE CAN END HAVING AN ANTI–TENSION SCORE

Priority: US20130781416P 20130314 US20140773882 20140310 WO2014US22502 20140310

Family:

Publication number	Publication date	Application number	Application date
CN105228911 A	20160106	CN201480027504	20140310
EP2969798 A1	20160120	EP20140716106	20140310
US2016023801 AA	20160128	US20140773882	20140310
WO14150180 A1	20140925	WO2014US22502	20140310

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING TECHNOLOGY INC

Inventor(s):(std)**:** KEANE BRENDAN

Agent(s): LIND ROBERT; FULLMER HAROLD H

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/32 (Advanced/Invention)

CPC: B65D2517/0082 B65D2517/008 B65D17/165 B65D17/24 B65D2517/0014 B65D2517/0062 B65D2517/0076 B65D2517/0095

US class: 220/271

Classification Explorer

Cited documents: WO9602432 A1, WO11053776 A1, US85714501, US6354453 BA, US6079583 A, US5555992 A, US5011037 A, US4289251 A, US3977561 A, US2013126529 AA, US2013037542 AA, US2012082529 AA, US2012031056 AA, US2004099664 AA, US2003075544 AA, GB2116934 B2, CN101394999 A, CN101128361 A, CA2777915 AA, AU8729282 A1,

Forward Citations: WO17019269, USD787952,

Abstract:
Source: US2016023801A A beverage can end for seaming onto a can body may include a peripheral wall, a center panel (26), a tab (attached to the center panel by a rivet (28), a tear panel (60), a main reference line (Rm), a transverse reference line (R1), and a score (30). The end includes an anti–fracture score (40) proximate a vent score (70). The center panel includes a recess (27), in which the main score, an antifracture score, and (optionally) the anti–tension score (50) are located. The score is configured such that lifting the tab from its horizontal rest position to an intermediate position ruptures the main score portion to pivot the tear panel main portion about the hinge (70) and a second lifting operation or twisting operation of the tab ruptures the main score extension (34).

0) US3952912A – CONTAINER WITH ATTACHED CLOSURE

34) Family number: 6653037 (US3952912A) © PatBase

Title: Container with attached closure

Priority: US19720231124 19720302 US19740514069 19741011 US19760744162 19761122 US19740515444 19741017 US19760712839 19760809 US19760717993 19760826

Family:

Publication number	Publication date	Application number	Application date
US3843011 A	19741022	US19720231124	19720302
US3952912 A	19760427	US19740514069	19741011
US3977578 A	19760831	US19740515444	19741017
US4051976 A	19771004	US19760712839	19760809
US4062471 A	19771213	US19760717993	19760826
US4084721 A	19780418	US19760744162	19761122

Probable Assignee: CONTINENTAL GROUP

Assignee(s):(std)**:** CONTINENTAL GROUP ; PERRY DECEASED WALTER MERTON ; PERRY EXECUTRIX BY ELIZABETH D ; PERRY W ; PERRY WALTER MERTON

Assignee(s): PERRY W US ; THE CONTINENTAL GROUP INC

Inventor(s):(std)**:** PERRY WALTER MERTON ; PERRY W ; PERRY EXECUTRIX BY ELIZABETH D ; PERRY DECEASED WALTER MERTON

Inventor(s): PERRY W US

International class (IPC 8–9): B21D51/38 B21D51/44 B65D17/32 B65D17/50 (Advanced/Invention); B21D51/38 B65D17/00 B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/00 B65D17/16 B65D17/24 B65D17/32 B65D41/32 B65D43/02 B65D47/10

CPC: B21D51/383 B65D17/16 B65D17/165 B65D17/166 B65D17/503 B65D17/506 B65D2517/0011 B65D2517/0013 B65D2517/0014 B65D2517/0017 B65D2517/002 B65D2517/0062 B65D2517/007 B65D2517/0071 B65D2517/0098 B65D2517/5008 B65D2517/5029 B65D2517/5048 B65D2517/5056 B65D2517/5081 B65D2517/5091 B65D17/161

European class: B21D51/38B B65D17/16 B65D17/16B B65D17/16B2 B65D17/16B2B B65D17/50A2 B65D17/50B L65D517/00Y2A L65D517/00Y2B L65D517/00Y2C L65D517/00Y2E L65D517/00Y2Z L65D517/00Y7A1A L65D517/00Y7B1 L65D517/00Y7B2 L65D517/00Y9 L65D517/50M10A1 L65D517/50M2 L65D517/50P1A1 L65D517/50P2 L65D517/50Q1B L65D517/50Q99

US class: 220/260 220/265 220/268 220/269 220/277 220/359.2 220/47 222/541 222/541.9 222/561

Classification Explorer

Cited documents: US3977561 A, US3967753 A, US3967752 A, US3856184 A, US3843011 A, US3836038 A, US3744667 A, US3744666 A, US3738526 A, US3703979 A, US3446389 A, US2723778 A, US2590437 A, US2320484 A, US2274752 A, US2261117 A, US117510 A,

Forward Citations: WO9714621, WO8907556, WO16132287, WO14003586, WO14003585, WO13018110, WO12112487, WO11117772, WO09051409, WO09051409, WO08104392, WO08051099, WO07147542, WO07056844, WO06010688, WO04113186, WO02070165, WO0183303, WO0146025, WO0105663, WO0105663, WO0069735, WO0056613, WO0037323, USRE42485, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD691039, USD582274, USD582273, USD533452, USD532691, USD532298, USD530610, USD513452, USD509426, USD507485, USD476889, US9592928, US9566634, US9540137, US9446879, US9359108, US9267705, US9233784, US9163653, US9033174, US8998015, US8973780, US8950619, US8875936, US8870012, US8783495, US8733576, US8627979, US8616399, US8567158, US8556104, US8371467, US8328492, US8215513, US8196767, US8104319, US8080770, US8052005, US8011527, US7975884, US7950542, US7812292, US7748563, US7644833, US7594585, US7556168, US7378625, US7350392, US7174762, US7165696, US7112771, US7051896, US7004345, US7000797, US6772900, US6761281, US6748789, US6715629, US6405889, US6354453, US6330954, US6260728, US6244455, US6234336, US6161717,

US6129230, US6079583, US6024239, US5967726, US5931331, US5860553, US5806757, US5715964, US5711448, US5692636, US5566850, US5555992, US5402921, US5375729, US5335808, US5219257, US5129541, US5085348, US5065882, US5064087, US5007231, US4901880, US4801038, US4624386, US4585140, US4446985, US4411370, US4387827, US4372462, US4322016, US4184607, US4155480, US4141464, US4078695, US4078694, US4054228, US4030631, US4024981, US4024980, US3997075, US3977578, US3977561, US3972445, US3967753, US3967752, US3967750, US3935961, US2015353229, US2015176622, US2012043325, US2012031056, US2010269345, US2010213194, US2010200590, US2010163560, US2010065568, US2009269169, US2009266824, US2009206083, US2009090716, US2008257900, US2008073343, US2008050207, US2008011786, US2007284368, US2007108208, US2007108198, US2007108197, US2007108196, US2007102425, US2006163253, US2006096994, US2005199619, US2005199617, US2005051552, US2005006388, US2004211786, US2004211780, US2004200838, US2004065663, US2003213803, US2003080132, US2003042258, US2003038134, US2003001788, JP57196640, JP56056734, JP5414074, JP2011500467, JP2003517974, GB2156772, GB2125762, FR2957898, EP2969799, EP2546159, EP1964784, EP0621195, EP0592550, EP0160626, EP0160626, EP0090809, EP0033449, EP0000091, EA017452, EA015059, DE2707064, AU761490,

Abstract:
Source: US3952912A Improved easy opening means for containers. Especially adapted to those used for liquids, including carbonated beverages, and permitting drinking from the container or pouring out contents. An important feature is attachment of closure to container after opening to avoid litter. Another feature is lift tab for easy opening, and with closure sealed by either a frangible adhesive sealant or by membrane sealing means. Lift tab initiates rupture of sealant, and then is pushed below container top with means to hold tab below opening so there is no interference when drinking from the can. Another closure has a small end for initial pressure release, and then whole closure hinges inwardly. Still another means comprises a slide gate with frangible membrane for sealing and for very easy opening. Optionally a pressure release button is provided to release the internal pressure before pulling the slide gate. An improved forming method for making the opening smaller than the closure where the closure is cut from the ductile metal top material. Partial use of score lines is included. Container top may be of ductile metal or of plastic for some of the designs. Primary objectives are the elimination of separate closure device that would cause litter, closure easier to open than heretofore, low cost, and no danger of a piece coming loose inside container.

0) US3477608A – EASY–OPENING CAN END HAVING VENT MEANS

35) Family number: 374635 (US3477608A) © PatBase

Title: EASY–OPENING CAN END HAVING VENT MEANS

Priority: US19680777584 19681121

Family:

Publication number	Publication date	Application number	Application date
CA934678 A1	19731002	CA19690052984	19690529
DE1958069 A1	19700924	DE19691958069	19691119
DE1958069 B2	19761014	DE19691958069	19691119
DE1958069 C3	19770526	DE19691958069	19691119
DK122802 B	19720417	DK19690006067	19691117
FR2023808 A1	19700821	FR19690040011	19691120
GB1229113 A	19710421		19690811
JP51037596 B4	19761016	JP19690049702	19690625
US3477608 A	19691111	US19680777584	19681121

Probable Assignee: FRAZE ERMAL C

Assignee(s):(std)**:** FRAZE ERMAL C

Assignee(s): FRAZE ERMAL CLEON ; ERMAL C FRAZE ; ERMAL CLEON FRAZE INGENIOER ; FRAZE ERMAL

Inventor(s):(std)**:** FRAZE ERMAL CLEON ; FRAZE ERMAL C ; ERMAL CLEON FRAZE ; CLEON FRAZE ERMAL

Inventor(s): ERMAL C FRAZE ; ERMAL CLEON FRAZE INGENIOER

International class (IPC 8–9)**:** B21D51/38 B65D17/34 B65D17/347 B65D17/35 B65D17/353 (Advanced/Invention); B21D51/38 B65D17/28 (Core/Invention)

International class (IPC 1–7)**:** B21D51/40 B65D17/00 B65D17/24 B65D51/16

CPC: Y10T29/49915 B65D17/163 B21D51/383 B65D2205/00

European class: B21D51/38B B65D17/16B1 L65D205/00

US class: 220/231 220/273 220/54 29/509 D9/438

Classification Explorer

Cited documents: US3434622 A, US3416699 A, US3404801 A, US3366270 A, US3307737 A,

Forward Citations: WO13022592, WO09131994, USD669781, USD649049, USD647400, USD643718, USD641623, USD641622, USD641239, US9199763, US9016504, US9016034, US8939308, US8733576, US8454292, US8371467, US8336728, US8113375, US7922025, US7721906, US5713481, US4245491, US3750606, US3727789, US3720348, US3656652, US3604589, US2011056945, US2010287886, US2010116374, US2009261101, US2008067174, US2008067171, US2007108209, JP2014527003, GB2241218, GB2241218, FR2088296, EP2741965, EP1015331, EP0693429, DE3909787, DE2421314, CN103732502,

Abstract:
Source: US3477608A ABSTRACT OF THE DISCLOSURE This disclosure describes an easy–opening container wall having a first line of weakness defimng a panel removable from the can end and a tab connected to the panel for causing removal of the panel from the container wall. The tab is connected to the panel by first and second attachment means and a second rupturable line of weakness in the container wall extends between one of the attachment means and the lifting end of the tab. In one form of the invention, the second line of weakness extends between the two attachment means and one of the attachment means is rupturable so that upon lifting of the tab, the rupturable attachment means and the second rupturable line of weakness both rupture to provide vent openings. According to another form of the invention, the second line of weakness extends intermediate the second attachment means and the lifting end of the tab and both of the attachment means are nonrupturable in ordinary usage of the tab. The disclosure also describes a rupturable vent rivet and a method of making same. B

0) US2004140309A – END CLOSURE WITH ANTI–ROTATION TAB

36) Family number: 30734309 (US2004140309A) © PatBase

Title: END CLOSURE WITH ANTI–ROTATION TAB

Priority: US20030349153 20030122

Family:

Publication number	Publication date	Application number	Application date
US2004140309 AA	20040722	US20030349153	20030122
US6951293 BB	20051004	US20030349153	20030122
WO04065236 A1	20040805	WO2004IB00332	20040121

Probable Assignee: REXAM BEVERAGE CAN EUROPE LTD

Assignee(s):(std)**:** REXAM BEVERAGE CAN CO ; REXAM BEVERAGE CAN EUROP LTD ; REXAM BEVERAGE CAN EUROPE LTD ; THIBAUT MICHEL

Assignee(s): REXAM BEVERAGE CAN SERVICES LTD ; REXAM BEVERAGE CAN EUROPE LIMITED ; REXAM BEVERAGE CAN COMPANY

Inventor(s):(std)**:** THIBAUT MICHEL

Agent(s): WALLENSTEIN WAGNER AND ROCKEY LTD

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B65D17/32 B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/32 B65D17/34

CPC: Y10S220/906 B65D17/165 B65D2517/0014 B65D2517/0077

European class: B65D17/16B2 L65D517/00Y2C L65D517/00Y7C2

US class: 220/268 220/269 220/270 220/906

Classification Explorer

Cited documents: WO0071430 A1, USD289017 S1, US6053349 A, US5799816 A, US5741105 A, US5655678 A, US5494184 A, US5248053 A, US5224618 A, US5131555 A, US5129541 A, US4930658 A, US4804104 A, US4733793 A, US4416389 A, US4363419 A, US4276993 A, US3967754 A, US3941276 A, US3780902 A, JPH0853131, JP8053131 A2,

Forward Citations: WO06082464, USD762114, USD750488, USD749415, USD731887, USD625184, US9446879, US9403628, US9248936, US9233784, US9186924, US9181007, US9162795, US8844747, US8146768, US7909196, US7703624, US2014263328, US2013118133, US2011226636, US2010193519, US2007039961, US2005252917, US2005045637,

Abstract:
Source: US2004140309A An end closure for a container providing a tab with increased resistance to rotation upon a rivet is disclosed. The end closure has a central panel wall having a product side, a public side, a rivet, and a displaceable tear panel in the central panel wall at least substantially defined by a frangible score and a non–frangible hinge segment. A tab is attached to the public side of the central panel wall by the rivet. At least a nose portion of the tab extends over a portion of the tear panel. A lift end of the tab is opposite the tab nose. The tab has a central webbing between the nose and the lift end. The central webbing has an anti–rotation member in communication with the public side of the central panel wall. The anti–rotation member provides a spring force against the central panel wall.

0) US6050440A – EASY OPEN CONTAINER END, METHOD OF MANUFACTURE,...

37) Family number: 20526551 (US6050440A) © PatBase

Title: EASY OPEN CONTAINER END, METHOD OF MANUFACTURE, AND TOOLING

Priority: US19960048638F 19960105 US19960603820 19960220 WO1997US02449 19970214

Family:

Publication number	Publication date	Application number	Application date
AU199722757 A1	19970902	AU19970022757	19970214
EP0958178 A2	19991124	EP19970905998	19970214
JP2000504659 T2	20000418	JP19970529545T	19970214
US6050440 A	20000418	US19960603820	19960220
WO9729960 A2	19970821	WO1997US02449	19970214
WO9729960 A3	19971002	WO1997US02449	19970214

Probable Assignee: STOLLE MACHINERY CO LLC

Assignee(s):(std)**:** ALUMINUM CO OF AMERICA ; MCELDOWNEY CARL

Assignee(s): STOLLE MACHINERY CO ; GMAC COMMERCIAL FINANCE LLC ; GOLDMAN SACHS CREDIT PARTNERS LP ; ALUMINUM COMPANY OF AMERICA ; STOLLE MACHINERY CO LLC ; ALCOA INC ; ALUMINIUM CO OF AMERICA ; ALUMINIUM COMPANY OF AMERICA ; ALUMINUM CO

Inventor(s):(std)**:** MCELDOWNEY CARL

Inventor(s): CARL MCELDOWNEY

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CH CN CU CZ DE DK EE ES FI FR GB GE GR HU IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG US UZ VN YU

International class (IPC 8–9)**:** B65D17/00 B65D17/32 B65D17/34 B65D17/50 B65D47/00 (Advanced/Invention); B65D (Subclass/Invention)

International class (IPC 1–7)**:** B65D17/00 B65D17/32 B65D17/34 B65D47/00

CPC: Y10S220/906 B65D17/165

European class: B65D17/16B2

US class: 220/269 220/271 220/608 220/906

Classification Explorer

Cited documents: USRE31702, USD365988, USD338156, USD337521, US5456378 A, US5405039 A, US5375729 A, US5248053 A, US5224618 A, US5131555 A, US5129541 A, US5011037 A, US4951835 A, US4930658 A, US4930654 A, US4872597 A, US4733793 A, US4610156 A, US4524879 A, US4465204 A, US4387827 A, US4363419 A, US4361251 A, US4276993 A, US4219127 A, US4211335 A, US4210257 A, US4205760 A, US4184607 A, US4148410 A, US4061243 A, US4024981 A, US4015744 A, US3977561 A, US3929252 A, US3534883 A, US31702 A, GB1540229 A,

Forward Citations: WO9901351, WO9901351, WO15183812, WO04026712, WO0034137, USRE42485, USD762114, USD750488, USD749415, USD704555, USD507485, USD476889, US9446879, US9181007, US9010561, US8950619, US8877111, US8627979, US8196767, US8109405, US8047754, US7909555, US7594585, US7165696, US7000797, US6889862, US6405889, US6234336, US6024239, US2015259094, US2010032433, US2008314906, US2008190934, US2008069667, US2008066290, US2007108208, US2004056032, TWI374838, KR101172337, JP2010241508, EP1556287, EP1318077, EP1306310, EP1135300, EP0993408, AU762618, AU2005328082,

Abstract:
Source: US6050440A An easy open can end has an improved structure for facilitating the opening operation of the tear panel, a method of further forming a can end to have the improved structure, and tooling for accomplishing the method. The further formation of the can end is particularly useful in easy–open can ends having enlarged tear panels.

38) Family number: 30127533 (US2003075414A) © PatBase

Title: Method and apparatus for conditioning coins prior to discrimination

Priority:

AU19970038789	19970627	AU20010057970	20010810	CA19972259234	19970627
CA19972426411	19970627	CA19972426293	19970627	CA19972426462	19970627
GB19990030669	19970627	GB19990030668	19980626	CA19982295129	19980626
EP19970907936	19970228	EP19970936020	19970627	CA19982581740	19980626
CA20032259234	20030523	CA20072295129	20070418	NZ19970333535	19970627
US19970056919P	19970522	US20000638175	20000811	US19990336077	19990615
US19970882703	19970625	US19970882701	19970625	US19960056919P	19960628
US20000704178	20001031	US19980042784	19980317	US19970807340	19970228
US19960012964P	19960307	US20000703946	20001031	US19980105403	19980626
US19970883780	19970627	US19970807046	19970224	US19960672639	19960628
US20060344966	20060201	US20080273172	20081118	US20080258085	20081024
US20040997070	20041123	US20030652953	20030828	WO1997US11166	19970627
WO1998US13420	19980626	WO1997US03136	19970228	US20020304384	20021125
US20070734355	20070412	US20040825951	20040416	US20030336617	20030102
WO1997US11174	19970627				

Family:

Publication number	Publication date	Application number	Application date
AT372566 E	20070915	AT19970907936T	19970228
AU199719808 A1	19970922	AU19970019808	19970228
AU199737921 A1	19980121	AU19970037921	19970627
AU199738789 A1	19980121	AU19970038789	19970627
AU199881735 A1	19990119	AU19980081735	19980626
AU200157970 A5	20011025	AU20010057970D	20010810
AU2005200256 AA	20050217	AU20050200256	20050121
AU2005200256 BB	20071108	AU20050200256	20050121
AU753323 B2	20021017	AU19980081735	19980626
AU777507 B2	20041021	AU20010057970	20010810
CA2248022 AA	19980901	CA19972248022	19970228
CA2248022 C	20060124	CA19972248022	19970228
CA2259234 AA	19981221	CA19972259234	19970627
CA2259234 C	20030812	CA19972259234	19970627
CA2295129 AA	19991223	CA19982295129	19980626
CA2295129 C	20070619	CA19982295129	19980626
CA2295767 AA	19991224	CA19972295767	19970627
CA2426293 AA	19980108	CA19972426293	19970627
CA2426293 C	20130219	CA19972426293	19970627
CA2426411 AA	19980108	CA19972426411	19970627
CA2426411 C	20130416	CA19972426411	19970627
CA2426462 AA	19980108	CA19972426462	19970627
CA2426462 C	20041102	CA19972426462	19970627
CA2581740 AA	19990107	CA19982581740	19980626
CA2581740 C	20130618	CA19982581740	19980626
CN1212778 A	19990331	CN19971092835	19970228
CN1228858 A	19990915	CN19971097440	19970627
DE69738112 D1	20071018	DE19976038112	19970228
EP0956542 A2	19991117	EP19970936020	19970627
EP0956542 A4	20030910	EP19970936020	19970627
EP0956543 A1	19991117	EP19970907936	19970228
EP0956543 A4	20010124	EP19970907936	19970228

EP0956543 B1	20070905	EP19970907936	19970228	
EP1646014 A2	20060412	EP20050025871	19970627	
EP1646014 A3	20080625	EP20050025871	19970627	
EP1646015 A2	20060412	EP20050025872	19970627	
EP1646015 A3	20071128	EP20050025872	19970627	
EP1862977 A2	20071205	EP20070015920	19970228	
EP1862977 A3	20080402	EP20070015920	19970228	
GB199930668 A0	20000216	GB19990030668	19980626	
GB199930669 A0	20000216	GB19990030669	19970627	
GB200106413 A0	20010502	GB20010006413	19980626	
GB200106414 A0	20010502	GB20010006414	19980626	
GB200106415 A0	20010502	GB20010006415	19980626	
GB200107487 A0	20010516	GB20010007487	19970627	
GB200107490 A0	20010516	GB20010007490	19970627	
GB200107493 A0	20010516	GB20010007493	19970627	
GB2341710 A1	20000322	GB19990030668	19980626	
GB2341710 B2	20011031	GB19990030668	19980626	
GB2341711 A1	20000322	GB19990030669	19970627	
GB2341711 B2	20010606	GB19990030669	19970627	
GB2356966 A1	20010606	GB20010007493	19970627	
GB2356966 B2	20010718	GB20010007493	19970627	
GB2357885 A1	20010704	GB20010007487	19970627	
GB2357885 B2	20010822	GB20010007487	19970627	
GB2357886 A1	20010704	GB20010007490	19970627	
GB2357886 B2	20010815	GB20010007490	19970627	
GB2358271 A1	20010718	GB20010006413	19980626	
GB2358271 A8	20140723	GB20010006413	19980626	
GB2358271 B2	20011212	GB20010006413	19980626	
GB2358271 B8	20140723	GB20010006413	19980626	
GB2358272 A1	20010718	GB20010006414	19980626	
GB2358272 A8	20140723	GB20010006414	19980626	
GB2358272 B2	20011212	GB20010006414	19980626	
GB2358272 B8	20140723	GB20010006414	19980626	
GB2358273 A1	20010718	GB20010006415	19980626	
GB2358273 A8	20140723	GB20010006415	19980626	
GB2358273 B2	20020102	GB20010006415	19980626	
GB2358273 B8	20140723	GB20010006415	19980626	
JP2000506297 T2	20000523	JP19970531841T	19970228	
JP2002505770 T2	20020219	JP19980504313T	19970627	
NZ333535 A	20000825	NZ19970333535	19970627	
NZ505706 A	20020328	NZ19970505706	19970627	
NZ505707 A	20020628	NZ19970505707	19970627	
NZ505708 A	20020426	NZ19970505708	19970627	
US2003075414 AA	20030424	US20020304384	20021125	
US2003150688 AA	20030814	US20030336617	20030102	
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Designated states: BE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GE GH GM GN GR GW HU ID IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZW

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G07D3/00 (Advanced/Non–invention);
G01N27/02 G07D11/00 G07D3/00 G07D5/00 G07D9/00 G07F1/00 G07F5/00 H04R1/02 H04R27/00 (Core/Invention);
G10K11/00 (Core/Non–invention)

International class (IPC 1–7): B07B1/22 B07B1/24 G01N27/02 G07D1/00 G07D3/00 G07D3/10 G07D3/14 G07D5/00 G07D5/02 G07D5/08 G07D7/00 G07D9/00 G07F1/00 G07F1/04 G07F3/04 G07F5/08

CPC: G07D3/10 G07F1/041 B07B1/24 B08B5/00 G07D9/00 G07D1/02 Y10S193/01 G07F5/24 G07D3/06 G07D3/123 G07D3/14 G07D3/16 G07D5/00 G07D5/02 G07D5/08 G07D9/008

European class: B07B1/24 B08B5/00 G07D1/02 G07D3/06 G07D3/10 G07D3/12B2 G07D3/14 G07D3/16 G07D5/00 G07D5/02 G07D5/08 G07D9/00 G07D9/00F G07F1/04B G07F5/24 H04R5/02 H04R9/06A

US class: 193/DIG.1 194/216 194/217 194/302 194/317 194/317.7 194/318 194/319 194/344 194/346 194/347 209/233 232/14 232/41 232/57 273/138.2 273/148B 273/148R 312/270.1 312/270.2 312/270.3 312/293.1 312/293.2 453/57 453/57.7 453/57S 453/63 463/29 463/46 463/47

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Abstract:
Source: US2003075414A A coin conditioner is provided for cleaning or otherwise conditioning coins in a coin discriminator apparatus prior to transfer to a coin sensor. Coins enter through a feed tray and move down the length of a perforated tumbler, preferably without the use of gravity, such as under screw force, mechanical or centrifugal force. The spinning tumbler is preferably rotated about its longitudinal axis by a motor. In one embodiment, a blower or vacuum draws or moves air from one area to another, with the air preferably being filtered. As coins move through and down a tumbler, projections such as vanes, fins, ridges, dimples, spines or other raised features cause mechanical agitation and/or abrasion as coins are lifted and dropped while passing

longitudinally through the tumbler. The coins are conditioned and non−coin matter is collected as it is separated and/or abraded from the coin surfaces. Tumbler perforations permit non−coin matter to pass through the perforations into a collection tray or other apparatus and/or are collected into filter media as a result of the air flow. In one embodiment, the air pressure system eliminates or reduces the occurrence of low density or light non−coin matter, such as hair or dust, and prevents these materials from settling or being carried through downstream portions of the coin processing system.

0) US2011266281A – BEVERAGE CONTAINER LID WITH MOUTH OPENING AND S...

39) Family number: 49884018 (US2011266281A) © PatBase

Title: BEVERAGE CONTAINER LID WITH MOUTH OPENING AND SEPARATE PUSH IN VENT

Priority: US20100769010 20100428 US20140178356 20140212 WO2011US21620 20110119

Family:

Publication number	Publication date	Application number	Application date
CA2834330 AA	20131025	CA20112834330	20110119
US2011266281 AA	20111103	US20100769010	20100428
US2014158685 AA	20140612	US20140178356	20140212
US8678221 BB	20140325	US20100769010	20100428
US9162795 BB	20151020	US20140178356	20140212
WO11136860 A1	20111103	WO2011US21620	20110119

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** COORS BREWING CO ; CROWN PACKAGING TECHNOLOGY INC ; TOMS RAY ALAN ; THIEMANN DANIEL ALAN

Assignee(s): DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; COORS BREWING COMPANY

Inventor(s):(std)**:** THIEMANN DANIEL ALAN ; TOMS RAY ALAN

Agent(s): GOWLING LAFLEUR HENDERSON LLP; BAKER AND HOSTETLER LLP; JOHNSON BRENT P

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65B43/38 B65D17/00 B65D17/34 B65D51/16 (Advanced/Invention); B65D41/32 (Advanced/Non–invention)

CPC: B65D17/165 B65D41/32 B65D2517/0092

European class: B65D17/16B2 L65D517/00Y8A

US class: 1/1 215/370 215/902 220/231 220/254.2 220/254.3 220/254.4 220/266 220/267 220/267.1 220/268 220/270 220/271 220/906 222/478 53/492 53/492S

Classification Explorer

Cited documents: WO9325445 A1, WO14159208 A1, WO13067398 A2, WO12018549 A1, WO08023983 A1, USD437223 S1, USD422211 S1, USD322222 S1, US8678221 BB, US8196767 BB, US8186532 BB, US8011527 BB, US7975884 BB, US7942285 BB, US7748563 BB, US7513383 BB, US7000797 BB, US6951293 BB, US6763964 BA, US6715629 BB, US6494332 BA, US6354453 BA, US6234338 BA, US6079583 A, US6015060 A, US5860553 A, US5695085 A, US5692636 A, US5555992 A, US5492244 A, US5456378 A, US5397014 A, US5375729 A, US5307947 A, US5285919 A, US5224618 A, US5131555 A, US5011037 A, US4367996 A, US4136797 A, US4134517 A, US4014455 A, US3967754 A, US3964632 A, US3869063 A, US3838788 A, US3795340 A, US3782586 A, US3741432 A, US3441169 A, US3215305 A, US2014054290 AA, US2013270269 AA, US2013118133 AA, US2013075401 AA, US2013037543 AA, US2012202378 AA, US2012199587 AA, US2011266281 AA, US2011108552 AA, US2011056946 AA, US2010294771 AA, US2010219187 AA, US2010018976 AA, US2009206083 AA, US2009200306 AA, US2009090716 AA, US2009065518 AA, US2009039091 AA, US2009039090 AA, US2009001081 AA, US2008011786 AA, US2007215621 AA, US2007051727 AA, US2007045318 AA, US2007029334 AA, US2006016815 AA, US2004211786 AA, US2004159665 AA, US2004144787 AA, US2004140314 AA, US2004056032 AA, US2003111469 AA, US2003075544 AA, US2003038134 AA, JP60150922 A2, JP5504318 T2, JP5310248 A2, JP5178345 A2, JP2007320617 A2, JP2006347580 A2, JP2006160303 A2, JP2005343557 A2, JP2004042982 A2, JP2003285837 A2, JP2001018960 A2, JP2000185757 A2, JP11348979 A2, JP1035662, JP10035662 A2, GB2320008 A1, EP2601109 A1,

EP2113293 A2, CN302188734 A, CA2280461 AA,

Forward Citations: WO15138413, WO14159208, WO13067398, USD762114, USD750488, USD749415, USD731887, USD727725, USD715647, USD715144, USD678784, US9446879, US9403628, US9296529, US9238529, US9233784, US9181007, US9162795, US9102451, US9051081, US8893913, US8567158, US2016023821, US2015053681, US2014069924, US2014054290, CN105473455, CN104364164,

Abstract:
Source: US2011266281A A container lid includes a conventional main or pour opening and a vent opening spaced from the main opening. A vent score defines the shape of the vent opening, and a vent panel covers the vent opening. The vent panel has a raised convex shape. The lower surface of the tab handle includes a protruding portion, seen as a concave shaped element when viewed from above the container lid. The protruding portion of the tab handle can be aligned with the vent panel so application of a downward force on the tab handle transfers force to the vent panel and breaks the vent score. The shapes of the vent panel and concave element of the tab handle can be adjusted for selective and controlled force transfer to create the vent opening.

0) US4850230A – PULL TAB FORCE MEASURING APPARATUS

40) Family number: 3091249 (US4850230A) © PatBase

Title: Pull tab force measuring apparatus

Priority: US19880245904 19880919

Family:

Publication number	Publication date	Application number	Application date
US4850230 A	19890725	US19880245904	19880919
WO9003563 A1	19900405	WO1989US03684	19890824

Probable Assignee: COORS GLOBAL PROPERTIES INC

Assignee(s):(std): COORS CO ADOLPH

Assignee(s): COORS GLOBAL PROPERTIES INC ; ADOLPH COORS CO ; ADOLPH COORS CO GOLDEN COLORADO 80401 A CORP OF CO ; ADOLPH COORS COMPANY ; COORS BREWING CO GOLDEN CO ; COORS BREWING CO GOLDEN CO 80401 A CORP OF CO

Inventor(s):(std): ELDRIDGE LAWRENCE B ; ELDRIDGE LAWRENCE BOYD

Designated states: AT BE CH DE FR GB IT JP LU NL SE

International class (IPC 8–9): G01L5/00 G01N3/08 (Advanced/Invention); G01N33/00 (Advanced/Non–invention); G01L5/00 G01N3/08 (Core/Invention); G01N33/00 (Core/Non–invention)

International class (IPC 1–7): G01N3/08

CPC: G01L5/0033 G01N3/08 G01N2033/0081

European class: G01L5/00D2 G01N3/08 S01N33/00M2

US class: 73/835

Classification Explorer

Cited documents: US4637260 A, US3464261 A,

Forward Citations: US7267015, US7059202, US7059202, US6105230, US5092154, US5086653, US4938070, US2006060002, US2005252309,

Abstract:
Source: US4850230A Apparatus for measuring the forces applied to a pull tab during the formation of an opening in a container lid having an upper and lower surface with a pull tab hingedly secured on the upper surface and a score line in the container lid defining an opening and wherein one container lid at a time is fed into a holder having an opening therein so that a substantial portion of the upper surface of the container lid and all of the pull tab are exposed. A rotatable pull tab positioning head having a generally planar surface in which a recess in the shape of pull tab is formed is moved into resilient contact with the pull tab and is rotated relative to the container lid until the pull tab moves into the recess and thereafter the container lid and pull tab rotate with the positioning head to position the pull tab at a predetermined location. A load cell assembly having a pivotal hook member is moved into position with the hook member between the upper surface of the container lid and the pull tab. The container lid is rotated about the axis of the hinge connection of the pull tab and the hook member is held at a fixed position. As the container lid rotates, the hook member applies resistant forces on the pull tab until the opening is formed in the container lid which resistant forces are measured by the load cell assembly. The opened container lid is then discharged from the holder.

0) US2003015507A – LASER LIGHT MARKING OF A CONTAINER PORTION

41) Family number: 28673378 (US2003015507A) © PatBase

Title: LASER LIGHT MARKING OF A CONTAINER PORTION

Priority: US19980116794 19980716 US20000564429 20000504 US20000690278 20001016 WO1999US15990 19990715 US20020236193 20020906 US20000690282 20001016

Family:

Publication number	Publication date	Application number	Application date
AT287312 E	20050215	AT19990937259T	19990715
AU199952133 A1	20000207	AU19990052133	19990715
AU199952133 A5	20000207	AU19990052133	19990715
AU761807 B2	20030612	AU19990052133	19990715
CN1313801 A	20010919	CN19998009872	19990715
DE69923329 D1	20050224	DE19996023329	19990715
DE69923329 T2	20051020	DE19996023329T	19990715
DE69923329 T3	20090402	DE19996023329T	19990715
DK1113901 T3	20050523	DK19990937259T	19990715
EP1113901 A1	20010711	EP19990937259	19990715
EP1113901 A4	20021009	EP19990937259	19990715
EP1113901 B1	20050119	EP19990937259	19990715
EP1113901 B2	20080827	EP19990937259	19990715
ES2237134 T3	20050716	ES19990937259T	19990715
JP2002520164 T2	20020709	JP20000559962T	19990715
US2003015507 AA	20030123	US20020236193	20020906
US6080958 A	20000627	US19980116794	19980716
US6433302 BA	20020813	US20000564429	20000504
US6498318 BA	20021224	US20000690278	20001016
US6501046 BA	20021231	US20000690282	20001016
US6706995 BB	20040316	US20020236193	20020906
WO0003832 A1	20000127	WO1999US15990	19990715
WO0003832 C2	20000518	WO1999US15990	19990715

Probable Assignee: BALL CORP

Assignee(s):(std): BALL CORP

Assignee(s): BALL CORP BROOMFIELD ; MILLER EDWARD C ; MILLER TIMOTHY J

Inventor(s):(std): MILLER C ; MILLER E C ; MILLER EDWARD C ; MILLER J ; MILLER T J ; MILLER TIMOTHY J

Inventor(s): T J MILLER ; TIMOTHY J MILLER ; TJ MILLER ; E C MILLER ; EC MILLER ; EDWARD C MILLER

Agent(s): WATERMARK PATENT AND TRADE MARKS ATTORNEYS; WATERMARK INTELLECTUAL PROPERTY PTY LTD; RAYNOR JOHN

Designated states: AT AU BE CH CN CY DE DK ES FI FR GB GR IE IT JP LI LU MC MX NL PT SE

International class (IPC 8–9): A61K31/70 B21D51/38 B23K26/00 B23K26/08 B41F17/00 G01L3/10 G02B7/182 (Advanced/Invention); B23K101/12 B23K103/10 B23K26/00 (Advanced/Non–invention); B21D51/38 B23K26/08 (Core/Invention)

International class (IPC 1–7): A61K31/70 B21D51/38 B23K101/12 B23K103/10 B23K26/00 B23K26/08 B41F17/00 B41F17/00 G01L3/10 G02B7/182

CPC: Y10S220/906 B23K26/0853 B23K26/0823 Y10T29/49789 B23K26/082 B23K26/08 B21D51/383

European class: B21D51/38B B23K26/08 B23K26/08B B23K26/08D B23K26/08E4

US class: 219/121.68 219/121.680P 219/121.69 219/121.78 219/121.82 220/906 29/412

Classification Explorer

Cited documents: WO9947397 A1, WO9909853 A2, WO9747397 A1, WO9711892 A1, USRE35446 E, USD289017 S1, USD268250 S1, USD261364 S1, USD210870 S1, US6462303 BB, US6462303 B1, US6105806 A, US5855969 A, US5837962 A, US5800724 A, US5799815 A, US5751436 A, US5719372 A, US5718457 A, US5698119 A, US5653900 A, US5612525 A, US5600478 A, US5578120 A, US5523125 A, US5511920 A, US5492077 A, US5416951 A, US5401979 A, US5331443 A, US5315108 A, US5262613 A, US5235454 A, US5215864 A, US5202199 A, US5191695 A, US5170279 A, US5125780 A, US4998641 A, US4965829 A, US4922077 A, US4803136 A, US4635545 A, US4578329 A, US4530631 A, US4485935 A, US4476781 A, US4465204 A, US4459910 A, US4393411 A, US4380129 A, US4375025 A, US4363179 A, US4331256 A, US4323317 A, US4322016 A, US4304981 A, US4024545 A, US3958354 A, US3822496 A, US3796344 A, US3627858 A, US3471641 A, US3281024 A, PCTUS9709772, JPS63252746, JPS63205291, JP8175006 A2, JP8168890 A2, JP8053121 A2, JP8031391 A2, JP63252746 A2, JP63205291 A2, JP5178346 A2, GB2320008 A1, GB2185613 A1, GB1124958 A, FR2750396 A1, FR2649628 A3, EP0776725 A1, EP0650153 A2, EP0482776 A1, EP0289022 A2, DE4103746 A1, DE19701547 A1, DE19507827 A1, AU81794 A1,

Forward Citations: WO16183452, WO14150647, WO13158771, WO13049320, WO13049313, WO13044095, WO11115815, WO10091088, WO08070979, USD776530, USD625184, US9637267, US9592569, US9511601, US9340368, US9278776, US9259913, US9187221, US9186924, US9007413, US8884185, US8844747, US8544739, US8146768, US8084712, US7951409, US6926487, US6926456, US6881923, US6872913, US6815637, US6808351, US6780012, US6686694, US6639175, US6576871, US6479787, US6476349, US6455806, US2015045932, US2014042132, US2013001237, US2011226636, US2011084051, US2010314365, US2010193519, US2010084382, US2008223834, US2006140746, US2006138105, US2005258175, US2005244953, US2005045637, US2003226835, US2003178397, US2003116543, TWI490070, EP1328371, EP1328371, CN102700342, BE1014393, AU2006202191,

Abstract:
Source: US2003015507A A portion or component of a metal container is provided with markings or indicia using laser light. High−speed laser steering is used to position laser light or laser light pulses across a lateral and longitudinal extent in a relatively short time period such as a time period selected so as to avoid slowing, stopping or otherwise interfering with other container or container component production processes. Preferably, tab stock for container−opening tabs can be provided with 6 to 9 or more visible characters within a time window of 50 to 100 milliseconds or less. Preferably, the size and resolution provided by the pulses are sufficient to permit legible, and preferably attractive, formation of any standard typewriter characters. In one embodiment, other logos, designs, textures, backgrounds and similar features can be provided. In addition to tab stock, container ends can be laser marked during a standard process when a container−opening tab is joined to a container end and/or during an off−line process after the container−opening tab is joined to the container end.

0) US2006289549A – EDGE–TEARING TAMPER–EVIDENT CONTAINER

42) Family number: 34029940 (US2006289549A) © PatBase

Title: EDGE–TEARING TAMPER–EVIDENT CONTAINER

Priority: CA20062565664 20061026 US20050166308 20050624 US20090321254 20090120 US20060496215 20060731 US20080065907P 20080215 US20090371888 20090216 US20090512817 20090730

Family:

Publication number	Publication date	Application number	Application date
AU2006236072 AA	20080214	AU20060236072	20061117
AU2006236072 BB	20100325	AU20060236072	20061117
CA2565664 AA	20080131	CA20062565664	20061026
CA2565664 C	20120417	CA20062565664	20061026
DE602005010066 D1	20081113	DE200560010066T	20051031
EP1736417 A1	20061227	EP20050256721	20051031
EP1736417 B1	20081001	EP20050256721	20051031
EP1884478 A1	20080206	EP20060255708	20061106
MXPA06013396 A1	20081008	MX2006PA13396	20061117
US2006289549 AA	20061228	US20060496215	20060731
US2009223619 AA	20090910	US20090321254	20090120
US2009321463 AA	20091231	US20090512817	20090730
US7568589 BB	20090804	US20060496215	20060731
US7712626 BB	20100511	US20090512817	20090730
US7992743 BB	20110809	US20090321254	20090120
US8251249 BA	20120828	US20090371888	20090216

Probable Assignee: PACTIV PACKAGING INC

Assignee(s):(std)**:** PWP IND ; VOVAN TERRY

Assignee(s): UNION BANK OF CALIFORNIA NA ; PWP IND INC ; UNION BANK OF CALIFORNIA NA ADMINISTRATIVE AGENT A ; UNION BANK OF CALIFORNIA NA ADMINISTRATIVE AGENT AS ; PWP IND (CALIFORNIA CORPORATION) ; PWP IND CALIFORNIA CORP ; PWP IND CALIFORNIA CORPORATION ; BANK OF NEW YORK MELLON COLLATERAL AGENT AS ; PACTIV PACKAGING INC

Inventor(s):(std)**:** VOVAN TERRY

Inventor(s): TERRY VOVAN

Agent(s): PHILLIPS ORMONDE FITZPATRICK; SMART AND BIGGAR; HEDLEY NICHOLAS JAMES MATTHEW ET AL; LEON D ROSEN FREILICH HORNBAKER AND ROSEN; KNOBBE MARTENS OLSON AND BEAR LLP; LEON D; BAKER BOTTS LLP

Designated states: AL BA DE FR GB HR IT MK YU

International class(IPC 8–9)**:** B31B49/02 B32B37/00 B65D17/347 B65D17/353 B65D21/02 B65D39/00 B65D41/32 B65D43/02 B65D43/14 B65D43/16 B65D50/02 B65D51/00 B65D55/06 B65D6/28 B65D8/18 (Advanced/Invention); B31B49/00 B32B37/00 B65D17/28 B65D39/00 B65D41/32 B65D43/00 B65D43/02 B65D43/14 B65D50/00 B65D51/00 B65D55/02 (Core/Invention)

CPC: B65D43/021 B65D55/024 B65D2101/0092 B65D2543/00092 B65D2543/00101 B65D2543/00203 B65D2543/00222 B65D2543/00296 B65D2543/00351 B65D2543/0049 B65D2543/00509 B65D2543/00546 B65D2543/0062 B65D2543/00648 B65D2543/00685 B65D2543/00731 B65D2543/00768 B65D2543/00796 B65D2543/00842 B65D2543/0099

European class: B65D43/02S3D B65D55/02F L65D101/00A7 L65D543/00Y10B2 L65D543/00Y1F2C L65D543/00Y1F2D L65D543/00Y1F4C3B L65D543/00Y1G L65D543/00Y1M6 L65D543/00Y20D L65D543/00Y2D L65D543/00Y8D1 L65D543/00Y8D1C L65D543/00Y8D3N L65D543/00Y8S1B2 L65D543/00Y8S1B8 L65D543/00Y8S1D2 L65D543/00Y8S3B10 L65D543/00Y8S3B2 L65D543/00Y8S3D2

US class:

156/69 156/69P 206/228 206/369 206/461 220/23.83 220/23.86 220/266 220/377 220/4.21 220/4.22 220/4.23 220/4.24 220/4.26 220/4.27 220/500 220/520 220/521 220/523 220/751 220/752 220/767 220/789 220/791 220/796 220/826 220/836 220/839 220/839S 220/840 493/52 493/52S

Classification Explorer

Cited documents: WO05009857 A1, USRE36729 E, USD352000 S1, US7311218 BB, US7311218 B1, US7243813 BB, US7243813 B1, US7207457 BB, US7118003 BB, US7118003 B1, US7097058 BB, US7097058 B1, US7073680 BB, US7073680 B1, US7004341 BB, US6926165 BB, US6926165 B1, US6772901 BB, US6772901 B1, US6604645 BA, US6572909 BA, US6564958 BA, US6279774 BA, US6257435 BA, US6168044 BA, US6168044 B1, US6135304 A, US6116501 A, US6000570 A, US5979690 A, US5931332 A, US5897011 A, US5883771 A, US5875913 A, US5842593 A, US5683771 A, US5607075 A, US5604645 A, US5573134 A, US5545375 A, US5528814 A, US5511679 A, US5507406 A, US5507405 A, US5421473 A, US5307948 A, US5287959 A, US5249694 A, US5219087 A, US5219074 A, US5170905 A, US5133470 A, US5129531 A, US5115934 A, US5111954 A, US5111953 A, US5052574 A, US5040695 A, US5027969 A, US5007231 A, US5002198 A, US4998622 A, US4966292 A, US4930656 A, US4890758 A, US4881656 A, US4765463 A, US4759463 A, US4742935 A, US4627550 A, US4535889 A, US4434907 A, US4433793 A, US4113136 A, US4091930 A, US4006839 A, US3773207 A, US36729 A, US3572579 A, US352000 A, US2009206082 AA, US2009057313 AA, US2009021026 AA, US2008185383 AA, US2008163265 AA, US2008021026 AA, US2008006632 AA, US2008000904 AA, US2007202221 AA, US2007196541 AA, US2007138180 AA, US2007138046 AA, US2007108210 AA, US2007062948 AA, US2007012710 AA, US2006289549 AA, US2006289541 AA, US2006278652 AA, US2006266750 AA, US2006261070 AA, US2006255054 AA, US2006201946 AA, US2006163265 AA, US2006060578 AA, US2006006632 AA, US2006000904 AA, US2004134910 AA, US2003160051 AA, US2003052133 AA, GB2257118 A1, FR2819496 A1, FR2691952 A1, EP0752374 A1, DE7816353 U, DE7816353, DE4418935 A1, DE29914659 U1, DE29819718 U1, DE1999083197,

Forward Citations: WO16054297, WO08156921, USD776974, USD746678, USD742222, USD697795, USD686064, USD675517, USD673447, USD646563, USD645737, USD645339, US9656785, US9624009, US9580219, US9546018, US9493277, US9475621, US9409683, US9365331, US9352886, US9278786, US9187209, US9132942, US9120595, US9102446, US9051095, US9016503, US8944270, US8939307, US8939287, US8925755, US8851315, US8833589, US8789695, US8640914, US8608008, US8523000, US8371468, US8360262, US8322555, US8272526, US8251249, US8251242, US8215485, US8146766, US8127961, US8123064, US8083089, US8056750, US8028851, US7992743, US7832586, US7712626, US7681732, US2016355303, US2015329249, US2015136777, US2015060455, US2015060454, US2014224824, US2014106048, US2014061971, US2013233746, US2013220855, US2013043247, US2012241456, US2012005994, US2010224630, US2010181323, US2010155402, US2010102074, US2009321463, US2009223619, US2009211941, US2009206082, US2009120937, US2009090712, US2008277397, US2008000904, US2007045317, GB2497112, GB2483133, GB2483133, EP1801026,

Abstract:
Source: US2006289549A A food container formed from plastic, can be loaded with food and then closed by a clerk, and thereafter cannot be opened without tearing apart first sides (24, 26) of the base (12) and lid (16). The container is formed by a single sheet of plastic that forms a base and lid with second sides (20, 22) that are latched together and with adjacent first sides that are joined by a joint line (30) in the plastic that is creased and that has slits (40). At the joint line, the lid has a projecting lid tab (32) and the base has a projecting base tab (36). A person grasps both tabs, and lifts only the lid tab to tear apart the first sides of the base and lid along the joint line (30). Thereafter, the lid can be easily closed and reopened on the base.

43) Family number: 28256000 (US2001019058A) © PatBase

Title: Cover mountable to beverage container and mounting method and apparatus thereof

Priority: DE20001018685 20000414 KR19990029106U 19991222 KR19990035332 19990825 KR19990051022 19991117 KR19990058534 19991217 KR20000002006 20000125 KR20000005570 20000229 KR20000005571 20000229 US20010853810 20010511 US20000534203 20000324 US20010853815 20010511 KR20000002006U 20000125 KR20000005570U 20000229 KR20000005571U 20000229 US20020062166 20020131 WO2000KR00304 20000404

Family:

Publication number	Publication date	Application number	Application date
AU200036819 A5	20010319	AU20000036819	20000404
DE10018685 A1	20010607	DE20001018685	20000414
DE10018685 C2	20030618	DE20001018685	20000414
DE10066012 C2	20030710	DE20001066012	20000414
DE10066014 C2	20030703	DE20001066014	20000414
JP2001072113 A2	20010321	JP20000090328	20000329
KR100353681 B1	20020919	KR19990058534	19991217
KR19990083877 A	19991206	KR19990035332	19990825
KR20000006983 A	20000207	KR19990051022	19991117
KR20000017810 A	20000406	KR19990058534	19991217
KR200183702 Y1	20000601	KR19990029106U	19991222
KR200195208 Y1	20000901	KR20000005570U	20000229
KR200195209 Y1	20000901	KR20000005571U	20000229
KR200202465 Y1	20001115	KR20000002006U	20000125
US2001019058 AA	20010906	US20010853815	20010511
US2001040163 AA	20011115	US20010853810	20010511
US2002070219 AA	20020613	US20020062166	20020131
US6386814 BB	20020514	US20010853810	20010511
US6390749 BB	20020521	US20010853815	20010511
WO0114218 A1	20010301	WO2000KR00304	20000404

Probable Assignee: KANGSAN TECHNOLOGIES LTD

Assignee(s):(std)**:** CONIC KOREA INC ; KANG SAN TECHNOLOGIES LTD ; KANG SAN TECHNOLOGY LTD ; KANGSAN TECHNOLOGIES LTD

Assignee(s): KANGSAN TECHNOLOGIES LTD SEOUL SOUL

Inventor(s):(std)**:** SONG JONG HOON ; SONG JONGHOON

Inventor(s): JONG HOON SONG ; SONG IK SEON

Agent(s): SUZUKI SATORU

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT KE KG KP KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW

International class (IPC 8–9): B21D51/38 B65B7/28 B65D17/00 B65D17/28 B65D17/50 B65D41/62 B65D43/00 B65D51/00 B65D51/02 B65D51/24 B65D77/20 (Advanced/Invention); B21D51/38 B65B7/28 B65D17/00 B65D17/28 B65D17/50 B65D43/00 B65D51/24 (Advanced/Non–invention); B21D51/38 B65D17/00 B65D43/00 (Core/Invention)

International class (IPC 1–7): A47G19/22 B21D51/26 B21D51/38 B21D51/44 B65B61/18 B65B7/28 B65D17/00 B65D17/50 B65D43/00 B65D43/02 B65D51/02 B65D51/20 B65D51/22 B65D51/24 B65D77/20

CPC: B65D17/165 B65D51/007 B65D2517/0013 B65D2517/0025 B65D2517/004 B65D2517/0041 B65D2517/0098

European class: B65D17/16B2 B65D51/00F L65D517/00Y2B L65D517/00Y3B L65D517/00Y5D L65D517/00Y5D1 L65D517/00Y9

US class: 220/253 220/253S 220/254.4 220/254.400P 220/257.2 220/257.200S 220/258 220/258.2 220/258.200P 220/258.200S 220/258.5 220/258.500S 220/716 220/716S 220/730 220/730S 413/12 413/13 413/13S 413/14 413/2 413/45 413/47 413/47S 413/52 413/52S 413/53 413/54 413/66 413/78 53/133.2 53/133.200S 53/139.5 53/410 53/412 53/412S

Classification Explorer

Cited documents: US5893489 A, US5720412 A, US5707196 A, US5692616 A, US5421472 A, US5269432 A, US5147057 A, US5142769 A, US5131554 A, US5119311 A, US5102002 A, US5071019 A, US4938379 A, US4927048 A, US4880136 A, US4852763 A, US4717039 A, US4681238 A, US4213537 A, US4205759 A, US4166424 A, US4136629 A, US4092940 A, US4026226 A, GB547229 A,

Forward Citations: WO17027727, WO15152592, WO15109349, WO13020706, WO12010258, WO12007496, WO09001984, WO07053277, WO02085628, USD787952, USD672235, USD658980, USD654791, USD653538, USD632562, USD578392, USD500343, US8998028, US8881940, US8875926, US8708188, US8622238, US8579148, US8534490, US8201706, US7914640, US7475787, US7025224, US2014251997, US2013240535, US2012312815, US2011100854, US2010065573, US2009057314, US2009026201, US2008230544, US2008197618, US2007138187, US2007095847, US2006281965, US2006163251, US2006102629, US2005211708, US2004065662, NL2004639, KR200454700, JP2008543692, GB2441602, FR2853124, EP2557050, EP2502838, EP2409925, CN103287703, BE1018936,

Abstract:
Source: US2001019058A Disclosed is a cover mountable to a beverage container and mounting method and apparatus thereof. The container cover detachably mountable to an upper surface of a beverage container comprises a body which is formed to have substantially a disc−shaped configuration. The body is partly cut away from an edge toward a center thereof thereby to define a beverage discharging opening which has a predetermined width and a predetermined contour. The beverage discharging opening is capable of being selectively communicated with a discharging hole of the beverage container as the body is rotated. An inner end of the beverage discharging opening is delimited by a rotation guiding part which has a predetermined curvature to guide rotation of the body. The body has a straw insertion hole which is defined therein at a predetermined location to have a predetermined diameter in a manner such that a straw can be inserted therethrough. The body further has an advertisement surface which has a predetermined area in a manner such that an advertising design, letters, and so forth can be printed or an attachment can be affixed thereon.

0) US4733793A – SYSTEM FOR FORMING AN OPENING IN A CONTAINER EN...

44) Family number: 2852904 (US4733793A) © PatBase

Title: System for forming an opening in a container end member

Priority: CA19880565521 19880429 US19870045369 19870501 US19880168428 19880315

Family:

Publication number	Publication date	Application number	Application date
AU198815266 A1	19881103	AU19880015266	19880428
CA1301669 A1	19920526	CA19880565521	19880429
EP0289022 A2	19881102	EP19880106839	19880428
EP0289022 A3	19900103	EP19880106839	19880428
JP1045252 A2	19890217	JP19880103730	19880426
JP64045252 A2	19890217	JP19880103730	19880426
US4733793 A	19880329	US19870045369	19870501
US4804104 A	19890214	US19880168428	19880315

Probable Assignee: ADOLPH COORS CO A CO CORP

Assignee(s):(std)**:** COORS CO ADOLPH

Assignee(s): COORS BREWING CO A CORP OF CO ; COORS BREWING CO ; ADOLPH COORS COMPANY ; MOEN BRUCE A ; ADOLF COORS CO ; ADOLPH COORS CO ; ADOLPH COORS CO A CO CORP ; ADOLPH COORS CO A CORP OF CO ; ADOLPH COORS CO A CORP OF COLORADO ; ADOLPH COORS CO GOLDEN CO ; ADOLPH COORS CO GOLDEN COLORADO 80401 A CO

Inventor(s):(std)**:** BURUUSU ARAN MEEN ; MOEN BRUCE A ; MOEN BRUCE ALLEN

Inventor(s): BRUCE ALLEN MOEN

Agent(s): PHILLIPS ORMONDE FITZPATRICK; MITCHELL RICHARD J

Designated states: AT BE CH DE ES FR GB IT LI NL SE

International class(IPC 8–9)**:** B65D17/32 B65D17/34 B65D17/347 B65D17/35 B65D17/353 (Advanced/Invention); B65D17/28 (Core/Invention)

International class(IPC 1–7)**:** B65D17/32 B65D17/34

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/269 220/270

Classification Explorer

Cited documents: US4674649 A, US4501375 A, US4491236 A, US4416576 A, US4408697 A, US4407424 A, US4039099 A, US3967749 A, US3884382 A, US3618816 A, US3561631 A, US3437227 A, US3383008 A, US3341057 A, US3322296 A, US3247997 A, US3195768 A, US3195766 A, US3187932 A, US3186582 A, FR2293369 A1, EP0117125 A2,

Forward Citations: WO9512526, WO9326011, WO16122770, WO13062062, WO03033367, USD776530, USD424438, USD419873, US9533800, US9073655, US7909196, US7000797, US6951293, US6926487, US6761281, US6706995, US6501046, US6498318, US6433302, US6330954, US6105806, US6050440, US6026971, US6024239, US5964366, US5931331, US5779079, US5715964, US5711448, US5555992, US5200201, US5129541, US2016083136, US2013264342, US2005252917, US2004140309, US2003080132, TWI566994, JP2013095434, DE102014211265,

Abstract:
Source: US4733793A A container end member provided with a score line groove defining a severable tab portion that can be severed by applying an inwardly directed force thereto and a hinge portion for retaining the severable tab portion attached to the container end member and a one–piece integrally formed plastic member pivotally secured to the container end member and comprising an elongated body portion having an abutment end portion overlying a portion of the severable tab portion for applying the axially inwardly directed force thereto and a finger hole, ring pull handle end portion overlying another portion of the container end member so that when an axially outwardly directed force is applied to the transverse handle end portion, the elongated body portion will pivot

relative to the container end member so that the transverse abutment end portion will apply the axially inwardly directed force to the portion of the severable tab portion to sever the severable tab portion along the score line groove and form an outlet opening in the container end member. In a preferred embodiment, a relatively thin pull strip extends around and is spaced from the periphery of the elongated body portion and the abutment end portion and has two end portions integral with the handle portion. The bottom surface of the pull strip is spaced a distance from the container end member so that a finger tip may be placed thereunder to apply an axially outwardly directed force thereto which force is then applied to the handle portion.

0) US5779087A – CLOSING TAB

45) Family number: 11013753 (US5779087A) © PatBase

Title: Closing tab

Priority: US19960659266 19960606

Family:

Publication number	Publication date	Application number	Application date
US5779087 A	19980714	US19960659266	19960606

Probable Assignee: BAKER DARRYL J

Assignee(s):(std)**:** BAKER DARRYL J ; SHARPE ANDREW J

Inventor(s):(std)**:** BAKER DARRYL J ; SHARPE ANDREW J

International class (IPC 8–9)**:** B65D41/32 (Advanced/Invention); B65D41/32 (Core/Invention)

International class (IPC 1–7)**:** B65D41/32

CPC: B65D17/166

European class: B65D17/16B2B

US class: 220/258 220/258.2 220/269 220/336

Classification Explorer

Cited documents: US5121851 A, US5080249 A, US4979635 A, US4948008 A, US4887712 A, US4834258 A, US4648528 A, US4605141 A, US4580629 A, US4511057 A, US4442950 A,

Forward Citations: US7500577, US6059137, US2009001092, US2008272120, US2008217347, US2007138178, US2007131690, US2006163254,

Abstract:
Source: US5779087A An improved can closure device for the closing of easy–open metal can end walls including: a one piece closing tab having a central body, circumferential flange, annular sealing ring, semi–annular locking ring, semi–annular locking channel, tab opening strip, and a hole for attachment to a can end wall; an improved metal opening tab; an elongated attaching post/rivet; and a sealing channel provided in the sheet metal can end wall. The closing tab is co–mounted with and beneath the improved metal opening tab and minimally impacts the can opening function of the metal opening tab. The consumer opens the can in much the same way as he or she now does by using the existing metal opening tab. After the can is opened, the closing tab is rotated approximately 180 degrees, aligned with the can opening, and pushed downwardly into place to close the can, thus preventing loss of contents due to spillage, providing protection of the contents from dirt, sand, or insects, and retarding loss of carbonation. Improvements to the metal opening tab and the attaching post/rivet are required to accomodate the closing tab. These improvements consist of a downward enlargement of the side wall on the lever end of the metal opening tab, an elongation of the attaching post/rivet, and the provision of an annular sealing channel provided in the metal can end wall. Other than the aforesaid improvements, the metal can end wall and it's attachment to the can side wall are similar to that in common use today.

0) US3383008A – CAN END OPENER AND ATTACHING MEANS

46) Family number: 878980 (US3383008A) © PatBase

Title: Can end opener and attaching means

Priority: US19650458932 19650526 US19670692369 19671221

Family:

Publication number	Publication date	Application number	Application date
US3383008 A	19680514	US19650458932	19650526
US3463107 A	19690826	US19670692369	19671221

Probable Assignee: NAT CAN CORP

Assignee(s):(std): NAT CAN CORP

Assignee(s): NATIONAL CAN CORP ; AMERICAN NATIONAL CAN CORP

Inventor(s):(std): LIPSKE BENJAMIN B

Inventor(s): BENJAMIN B LIPSKE

International class (IPC 8–9): B21D51/38 B65D17/34 B67B7/40 (Advanced/Invention); B21D51/38 B65D17/28 B67B7/00 (Core/Invention)

International class (IPC 1–7): B21D51/00 B65D17/34

CPC: B21D51/383 B65D17/163 B65D17/165 B67B7/406

European class: B21D51/38B B65D17/16B1 B65D17/16B2 B67B7/40B2

US class: 220/270 220/54 413/14 413/20 D9/438

Classification Explorer

Cited documents: US3361291 A, US3294275 A, US3283945 A, US3254790 A, US3250426 A, US3223277 A, US2029328 A,

Forward Citations: WO06082464, US9296538, US9073655, US4533064, US4416576, US4309952, US3857166, US3661292, US2013264342, US2008142521, FR2515610, EP0289022, EP0136651, EP0079294,

Abstract:
Source: US3383008A (Claim 1) 1. An easy opening can end unit comprising, in combination, (a) a can end member and, included therein, (b) a line of weakness in the forin of a score line extending into but not through said end member at any point thereon and defining a removable portion of said end member, and, located in said removable portion, (c) a first, non–circular opening adapted to receive a fastener therein, (d) a tab unit, including a second opening therein to receive a fastener, said tab unit being adapted to be grasped by the fin.–ers, and, connecting said tab to said removable portion, (e) a fastencr with two ffanges and a shank portion extending therebetween, said shank portion being at least partly complementary in shape to said first opening, and of a size so as to prevent rotation of said shank portion within said first opening, said fastener fitting snugly in and extending through said first and second opening, and, covering said base of said fastener and the portions of the area immediately surrounding said fastener, (f) a synthetic resinous sealin– material, whereby a substantially gasimpermeable seal is formed across said opening in said can end member.

0) US2010025402A – PUSHDOWN OPENINGS WITH PURCHASE, LEVERAGE AND G...

47) Family number: 44322974 (US2010025402A) © PatBase

Title: PUSHDOWN OPENINGS WITH PURCHASE, LEVERAGE AND GAS–TIGHT RESEALABILITY FOR CAN ENDS

Priority: US20080067806P 20080303 US20080188494P 20080811 WO2009US01503 20090304 US20090583008 20090811

Family:

Publication number	Publication date	Application number	Application date
US2010025402 AA	20100204	US20090583008	20090811

Probable Assignee: HOFFMAN JONATHAN H

Assignee(s):(std)**:** HOFFMAN JONATHAN H ; LAZICH MATTHEW

Inventor(s):(std)**:** HOFFMAN JONATHAN H ; LAZICH MATTHEW

Agent(s): GEORGE PHILIP WHITE,PATENT AGENT; GEORGE PHILIP WHITE PATENT AGENT

International class (IPC 8–9)**:** B65B43/38 B65D17/34 (Advanced/Invention); B65B43/38 B65D17/28 (Core/Invention)

CPC: B65D17/166 B65D2517/002 B65D2517/0032

European class: B65D17/16B2B L65D517/00Y2Z L65D517/00Y5A

US class: 220/270 53/492

Classification Explorer

Forward Citations: WO15099636, WO14135619, US9457930, US9254945, US2014054332, US2012199586, JP2012184027, CN102874457, CN102795384, CN102795384,

Abstract:
Source: US2010025402A An easy–to–open and optionally resealable beverage can end provides opening by pressing downward. An actuator lies flat initially to conform to stackability requirements, but is readily repositionable to a ready–to–open state. In the ready–to–open state a planer surface of the actuator or tab is at a substantial angle to the can's top. A rigid body is interposed between it and the can's tear panel. The actuator is secured to the can top. Downward force ruptures the tear panel, opening the can. Using a wide actuator, a shallow protrusion on the actuator enables gas–tight resealability of a can opening. The shallow protrusion has an interrupted helix and fits into the can opening. Providing tab attachment via a radiused slot allows the small degree of rotational movement needed for the helix to be turned and pull the actuator bottom sealingly abutted proximate to the perimeter of the opened area.

0) US2011272406A – CAN END

48) Family number: 43569628 (US2011272406A) © PatBase

Title: CAN END

Priority: EP20080001985 20080202 EP20090705304 20090130 WO2009GB00251 20090130

Family:

Publication number	Publication date	Application number	Application date
DE602009016513 D1	20130814	DE200960016513T	20090130
EP2085319 A1	20090805	EP20080001985	20080202
EP2240375 A1	20101020	EP20090705304	20090130
EP2240375 B1	20130619	EP20090705304	20090130
ES2419957 T3	20130821	ES20090705304T	20090130
RU2010135967 A	20120310	RU20100135967	20090130
RU2516138 C2	20140520	RU20100135967	20090130
US2011272406 AA	20111110	US20090865600	20090130
US8627979 BB	20140114	US20090865600	20090130
WO09095672 A1	20090806	WO2009GB00251	20090130

Probable Assignee: REXAM BEVERAGE CAN EUROPE LTD

Assignee(s):(std)**:** CANDILLON STEPHANE ; REKSAM BEVERIDZH KEHN JUROUP LTD ; REXAM BEVERAGE CAN EUROP LTD ; REXAM BEVERAGE CAN EUROPE LTD ; THIBAUT MICHAEL ; ROHR RAINER ; THIBAUT MICHEL

Assignee(s): REXAM BEVERAGE CAN EUROPE LTD LUTON ; REXAM BEVERAGE CAN EUROPE LIMITED

Inventor(s):(std)**:** CANDILLON STEPHANE ; MIKHAEHL TIBO ; RAJNER ROR ; ROHR RAINER ; STEFAN KANDIJON ; THIBAUT MICHAEL ; THIBAUT MICHEL

Agent(s): ZEITLER VOLPERT KANDLBINDER PATENT U RECHTSANWAELTE PARTNERSCHAFT MBB; DUNLOP BRIAN KENNETH CHARLES; SERRAT SARA; UNGARETTI AND HARRIS LLP; DUNLOP BKC

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/32 B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

CPC: B65D17/165 B65D2517/0014

European class: B65D17/16B2 L65D517/00Y2C

US class: 220/269 220/270 220/906 413/12

Classification Explorer

Cited documents: WO9730902 A1, WO9729960 A3, WO9729960 A2, WO9637414 A1, WO01/46025, WO0034137 A1, WO00/34137A, USD448666 S1, USD411107 S1, USD387987 S1, USD387666 S1, USD243833 S1, USD218961 S1, US6330954 BA, US6234336 BA, US6024239 A, US5964366 A, US5875911 A, US5715964 A, US5711448 A, US4465204 A, US4084721 A, US2004099664 AA, US2004/0099664, RU2252182, EP1136300 A1, EP1135300 A1, EP0432659 A1, DE8915716 U, DE2553835 A1,

Forward Citations: WO14152235, USD762114, USD750488, USD749415, USD727725, USD715144, US9446879, US9233784, JP2013166569, EP3009368,

Abstract:
Source: US2011272406A A can end (10) having an end panel (12), an openable non−removable panel (15) defined by a score line (14) in the end panel (12) and a non−removable tab (13) attached to the end for acting on the openable panel (15) to cause it to pivot out of the plane of the end panel (12) to provide an opening, the opening being generally oblate with its minor axis passing through the tab characterised in that the ratio of the

dimension of the opening on its major axis to the dimension of the opening on its minor axis is greater than 1.7 and the opening area is greater than 350 mm2.

0) US4568230A – TWO–OUT BELT SYSTEM

49) Family number: 24047699 (US4568230A) © PatBase

Title: Two–out belt system

Priority: CA19850481459 19850514 EP19850105819 19850511 US19870054549 19870527 US19850772278 19850903 US19840610446 19840515

Family:

Publication number	Publication date	Application number	Application date
AU198542471 A1	19851121	AU19850042471	19850514
AU575647 B2	19880804	AU19850042471	19850514
CA1253401 A1	19890502	CA19850481459	19850514
DE3579255 D1	19900927	DE19853579255	19850511
EP0161651 A2	19851121	EP19850105819	19850511
EP0161651 A3	19861008	EP19850105819	19850511
EP0161651 B1	19900822	EP19850105819	19850511
HK63291 A	19910823	HK19910000632	19910815
JP1779584 C3	19930813	JP19850103621	19850515
JP4062816 B4	19921007	JP19850103621	19850515
JP61056748 A2	19860322	JP19850103621	19850515
NZ212055 A	19861008	NZ19850212055	19850513
SG9190585 A	19910823	SG19910090585	19910722
US4568230 A	19860204	US19840610446	19840515
US4640116 A	19870203	US19850772278	19850903
USRE33061 E	19890919	US19870054549	19870527
ZA8503600 A	19851224	ZA19850003600	19850513

Probable Assignee: DAYTON RELIABLE TOOL AND MFG CO

Assignee(s):(std)**:** DAYTON RELIABLE TOOL AND MFG CO ; DEITON RIRAIABURU TOOL AND MFG C ; DEITON RIRAIABURU TOOL AND MFG CO

Assignee(s): BROWN OMAR L ; DRT MFG CO ; DEITON RIRAIABURU TSUURU ANDO MFG CO ; DAYTON RELIABLE TOOL AND MFG CO DAYTON OHIO US

Inventor(s):(std)**:** BROWN OL ; OMAA ERU BURAUN ; OMAR L BROWN ; BROWN OMAR L ; BROWN O L

Inventor(s): BROWN OMAR LUTHER ; BROWN OMAR L DAYTON OHIO 45429 US

Agent(s): GRIFFITH HACK; GOWLING LAFLEUR HENDERSON LLP

Designated states: BE CH DE FR GB IT LI NL SE

International class (IPC 8–9): B21D51/38 B21D51/44 (Advanced/Invention); B21D51/38 (Core/Invention)

International class (IPC 1–7): B21D22/00 B21D22/02 B21D43/02 B21D51/00 B21D51/38 B21D51/44 B21J B30B15/30 B30B9/28 B65D47/36

CPC: B21D51/383

European class: B21D51/38B

US class: 413/14 413/62 413/66 413/8 72/352 72/356

Classification Explorer

Cited documents: US4546873 A, US4455114 A, US4341498 A, US4208976 A, US4026226 A, US3683834 A, US3683665 A, US3550546 A, US3470837 A, US3366086 A, US3245370 A, US3196817 A, DE2017097 A1, AU3550546 A1,

Forward Citations: WO9833609, WO8906575, WO14144119, USRE35530, US9550224, US9321097, US7464576, US7344347, US7305861, US7237999, US7237998, US7234907, US7063492, US7063492, US6808351, US6802683, US6695132, US6533518, US6524048, US6070713, US6022179, US5876171, US5806662, US5741105,

US5704754, US5660516, US5511920, US5349843, US5259496, US5224053, US5182934, US5158410, US5119664, US5102278, US5017072, US4936729, US4932822, US4854799, US4852745, US4822232, US4799846, US4762579, US4723882, US2010166528, US2008267736, US2008083255, US2008025820, US2006010953, US2003053890, GB2221858, GB2221858, EP1765532, EP0941830, EP0941779, EP0542310, EP0351158, EP0281777, DE3736513,

Abstract:
Source: US4568230A A press for converting ends for cans and the like is provided with a conveyor extending sideways through the press to carry shells for processing into can ends along an end converting path. Upper and lower conversion tooling is located along the end converting path at the top and bottom of the conveyor, defining a plurality of stations on opposite sides of the center of the tooling for working progressively on shells moved by the conveyor along the end converting path. First and second tab tooling, auxiliary to the main tooling means, is located on opposite sides of the conveyor extending transversely thereof and defining a tab forming path which bridges the end converting path. Opening tabs are formed from a strip of metal stock fed through the tab tooling and the strip with completed tabs is guided in a loop from the tab tooling back to a staking and attachment station on the end converting path for removal from the strip and attachment to the shells. The tooling is mounted to the press bed and slide such that the converting and tab forming paths are arranged in a symmetrical fashion which distributes reaction forces in a generally uniform manner over the opposed working areas of the bed and slide.

0) US2012285962A – RESEALABLE EASY–OPEN END

50) Family number: 48653342 (US2012285962A) © PatBase

Title: RESEALABLE EASY–OPEN END

Priority: EP20110786840 20110513 KR20100048475 20100525 WO2011KR03537 20110513

Family:

Publication number	Publication date	Application number	Application date
AU2011259117 AA	20111201	AU20110259117	20110513
AU2011259117 BB	20151112	AU20110259117	20110513
BR112012029732 A2	20160809	BR20121129732	20110513
CA2800466 AA	20121122	CA20112800466	20110513
CN102712386 A	20121003	CN201180005145	20110513
CN102712386 B	20150318	CN201180005145	20110513
DE602011020394 D1	20151119	DE201160020394T	20110513
EP2578507 A2	20130410	EP20110786840	20110513
EP2578507 A4	20140122	EP20110786840	20110513
EP2578507 B1	20151007	EP20110786840	20110513
ES2552353 T3	20151127	ES20110786840T	20110513
IN09203DN2012 A	20140704	IN2012DN09203	20121025
JP2013530105 T2	20130725	JP20130512524T	20110513
JP5888818 B2	20160322	JP20130512524T	20110513
KR101013669 B1	20110210	KR20100048475	20100525
MX2012013567 A1	20130916	MX20120013567	20110513
MX339674 B	20160601	MX20120013567	20110513
RU2012144574 A	20140627	RU20120144574	20110513
RU2571339 C2	20151220	RU20120144574	20110513
US2012285962 AA	20121115	US20110519135	20110513
US8608007 BB	20131217	US20110519135	20110513
WO11149207 A2	20111201	WO2011KR03537	20110513
WO11149207 A3	20120216	WO2011KR03537	20110513

Probable Assignee: SEO JIN

Assignee(s):(std)**:** JIN HYOK SEO ; SEO DZHIN KHEK ; SEO JIN ; SEO JIN HYOK

Inventor(s):(std)**:** JIN HYOK SEO ; SEO DZHIN KHEK ; SEO JIN HYOK

Agent(s): BAXTER IP; BAXTER PATENT ATTORNEYS PTY LTD; SMART AND BIGGAR; DR WEITZEL AND PARTNER PATENT U RECHTSANWAELTE MBB; BAILEY DAVID MARTIN; HANCOX JONATHAN CHRISTOPHER; CARPINTERO MARIO; WEBB LAW FIRM; JEONG TAE HOON ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/32 B65D17/34 B65D17/44 B65D25/34 B65D47/20 B65D51/20 (Advanced/Invention)

CPC: B65D17/166 B65D2203/02 B65D2517/0014 B65D2517/0044 B65D2517/0079

European class: B65D17/16B2B

US class: 220/258.2 220/259.3 220/269 220/270 220/820 220/821 220/906

Classification Explorer

Cited documents:

WO09142386 A2, US2007138178 AA, KR200341592 Y1, KR200341592 Y, KR200341592, KR20000036222 A, KR100908477 B1, JP9156637 A2, JP5058634 U, JP5058634 U, JP4506052 T2, JP4506052, JP2000335575 A2, JP2000335575, JP05058634 U, JP04506052, CN1230932 A,

Forward Citations: WO14135619, US9637269, US8875926, US2013240535, CN104148532,

Abstract:
Source: US2012285962A Provided is a resealable easy−open end including a panel functioning as an end for hermetically sealing a can and having an opening formed at one side thereof and on which a score (S) is engraved; a tab having a first button hole formed in a button coupling part formed at a center thereof, rotatably coupled to a first button protruding from the panel through the first button hole, and rotatably installed between a first position at which a front end pressing part is disposed on the opening and a second position at which a rear end finger portion is disposed on the opening; and a closing plate rotatably installed between the first position and the second position, and to configured to be supported by the tab at the second position to close the opening when the tab breaks the score to open the opening.

0) FR1358396A – PROCEDE ET MACHINE POUR FABRIQUER DES FERMETURE...

51) Family number: 20951217 (FR1358396A) © PatBase

Title: PROCEDE ET MACHINE POUR FABRIQUER DES FERMETURES DECHIRABLES POUR RECIPIENTS METHOD AND MACHINE FOR MANUFACTURING CLOSURES FOR CONTAINERS tear (Machine translation)

Priority: FR19620915822 19621119

Family:

Publication number	Publication date	Application number	Application date
FR1358396 A	19640417	FR19620915822	19621119

Probable Assignee: CANTOP

Assignee(s):(std)**:** CANTOP

Assignee(s): CANTOP INC

International class (IPC 8–9)**:** B21D51/38 (Advanced/Invention); B21D51/38 (Core/Invention)

International class (IPC 1–7)**:** B65D17/02

CPC: B21D51/383 B65D17/163

European class: B21D51/38B B65D17/16B1

Classification Explorer

Abstract:
Source: FR1358396A (Claim 1) 1. On execute un premier element comprenant une partie separable, on execute un second element forme, au moins partiellement, de matiere dechirable et on dispose le premier et le second elements en position active l'un par rapport a l'autre;

Machine translation: (Claim 1) 1. It execute a first element comprising a separable element is a second execute form, at least partially of material available TEAR and the first and second elements in the active position relative to the other;

0) US2011100854A – BEVERAGE CAN MARKETING DEVICE

52) Family number: 48789506 (US2011100854A) © PatBase

Title: BEVERAGE CAN MARKETING DEVICE

Priority: US20090254274P 20091023 US20100351258P 20100603 US20100406120P 20101023 US20100910792 20101023 US20120367533 20120207 US20130842023 20130315 WO2010US53881 20101023

Family:

Publication number	Publication date	Application number	Application date
CA2778711 AA	20120423	CA20102778711	20101023
CA2778711 C	20150922	CA20102778711	20101023
CN102725200 A	20121010	CN201080058801	20101023
CN102725200 B	20151202	CN201080058801	20101023
EP2490955 A2	20120829	EP20100825797	20101023
EP2490955 A4	20130320	EP20100825797	20101023
IN04469CN2012 A	20140221	IN2012CN04469	20120521
US2011100854 AA	20110505	US20100910792	20101023
US2012138620 AA	20120607	US20120367533	20120207
US2013313148 AA	20131128	US20130842023	20130315
US8534490 BB	20130917	US20100910792	20101023
US8708188 BB	20140429	US20120367533	20120207
WO11050346 A2	20110428	WO2010US53881	20101023
WO11050346 A3	20111222	WO2010US53881	20101023

Probable Assignee: CHAPIN BARRY W

Assignee(s):(std)**:** CHAPIN BARRY W

Inventor(s):(std)**:** CHAPIN BARRY W

Inventor(s): CHAPIN BARRY

Agent(s): BORDEN LADNER GERVAIS LLP; GUY ELIZABETH; CHAPIN IP LAW LLC; CHAPIN BARRY W

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A47G19/22 B65D1/40 B65D17/00 B65D25/34 B65D3/28 B65D41/32 B65D51/18 B65D8/00 B65D85/00 (Advanced/Invention)

CPC: B65D25/34 B65D2205/025 B65D2517/0056 B65D2517/0062 B65D2517/0088 B65D2517/0089 B65D85/00 B65D17/165

European class: B65D17/16B2 B65D25/34 L65D205/02A L65D517/00Y7A1A L65D517/00Y7D3B

US class: 206/459.5 206/459.500P 220/669 220/669S 220/718 220/729 220/733

Classification Explorer

Cited documents: WO9924326 A1, WO9583228 A1, WO9528328 A1, WO9302939 A1, WO10040193, WO09031111 A1, WO04108544 A1, WO03104092 A1, WO03089328 A1, WO0219878 A1, USD625190 S1, USD603218 S1, USD559680 S1, USD522860 S1, USD507485 S1, USD500343 S1, USD471453 S1, USD410844 S1, USD329603 S1, USD329602 S1, USD300607 S1, USD126200 S1, US8534490 BB, US7757887 BB, US7644833 BB, US7568586 BB, US7370774 BB, US7195130 BB, US7108469 BB, US7100789 BB, US7017769 BA, US6992586 BB, US6915553 BB, US6877607 BB, US6817819 BB, US6729495 BB, US6719166 BB, US6637616 BB, US6626314 BA, US6575324 BA, US6460723 BB, US6450358 BA, US6425493 BA, US6390749 BB, US6338418 BA, US6321927 BB, US6296137 BA, US6290084 BA, US6241114 BA, US6202881 BA, US6089072 A, US6073797 A, US6065634 A, US6053349 A, US5996832 A, US5971195

A, US5967363 A, US5934497 A, US5813561 A, US5692633 A, US5647497 A, US5645190 A, US5492077 A, US5292022 A, US5285924 A, US5273176 A, US5244111 A, US5131554 A, US5125525 A, US5119955 A, US5108003 A, US5105964 A, US5103973 A, US5014869 A, US5000338 A, US4969570 A, US4961510 A, US4941573 A, US4917258 A, US4880136 A, US4869389 A, US4834258 A, US4815628 A, US4752016 A, US4749100 A, US4741450 A, US4679702 A, US4609123 A, US4579257 A, US4087018 A, US4084525 A, US3894650 A, US3693829 A, US2812886 A, US2693685 A, US2011138742 AA, US2010332420 AA, US2010243663 AA, US2008257900 AA, US2008230544 AA, US2008217347 AA, US2008050207 AA, US2008006630 AA, US2008006600 AA, US2007187410 AA, US2007075089 AA, US2006289548 AA, US2006151501 AA, US2006070994 AA, US2005218013 AA, US2005189313 AA, US2005035018 AA, US2005035011 AA, US2005008299 AA, US2004256386 AA, US2004206764 AA, US2004108237 AA, US2004064983 AA, US2004020934 AA, US2003102313 AA, US2002158071 AA, US2002062922 AA, US2002050493 AA, US2001022305 AA, JP6171650, GB2188828 A1, EP1363836 A1, CN2312887 Y, CN2277376 Y, CN1715144 A, CN101397063 A,

Forward Citations: WO15042582, WO14150834, USD756773, USD739729, USD737142, USD736623, USD672235, US9637269, US9637267, US9340368, US9302830, US9272819, US9259913, US9248940, US9162794, US9085025, US8881938, US2017029183, US2015353229, US2015136630, US2015108130, US2014008367, US2013313148, US2013270267, US2013161219, US2013075296,

Abstract:
Source: US2011100854A A "clean can" beverage can includes a beverage can body and a beverage can top coupled to the body. The can top is shaped to define a groove between a lower inside edge of the rim of the can top and an upper surface of the can top. A non−toxic groove cover is disposed to cover the groove along at least a portion of the groove that is located adjacent to the openable section of the can top. The groove cover prevents collection of debris in the groove. The groove allows the can top to be wiped clean without debris getting stuck in the groove by sloping upwards towards the top of the tim. The groove can also cover the rim and an upper portion of the can body. The groove cover remains in place before, during and after opening of the can and while pouring to provide a more sanitary drinking experience.

53) Family number: 18888285 (US4804106A) © PatBase

Title: Measures to control opening of full–panel safety–edge, convenience–feature end closures

Priority: AU19870069318 19870123 CA19880578752 19880928 US19880147267 19880122 US19880147267 19880120 US19880147167 19880122 CA19880578885 19880929 WO1987US00102 19870123 WO1987US02649 19870929 WO1987US03418 19871223 WO1988US02512 19880722 WO1988US02475 19880720 US19890382624 19890426

Family:

Publication number	Publication date	Application number	Application date
AR243458 A1	19930831	AR19880309901	19880122
AU198769318 A1	19880810	AU19870069318	19870123
AU198783222 A1	19880810	AU19870083222	19870929
AU198811090 A1	19880810	AU19880011090	19871223
AU198821388 A1	19890418	AU19880021388	19880720
AU198823215 A1	19890418	AU19880023215	19880722
CA1312562 A1	19930112	CA19880578885	19880929
CA1317241 A1	19930504	CA19880578752	19880928
CN1035262 A	19890906	CN19881009281	19881222
CN1039769 A	19900221	CN19891004938	19890721
CN88100286 A	19880928	CN19881000286	19880122
DK215489 A	19890526	DK19890002154	19890502
DK215489 A0	19890502	DK19890002154	19890502
DK523488 A	19881117	DK19880005234	19880920
DK523488 A0	19880920	DK19880005234	19880920
EP0299013 A1	19890118	EP19880900752	19871223
EP0299013 A4	19901128	EP19880900752	19871223
EP0333805 A1	19890927	EP19880908041	19880722
ES2009161 AF	19890901	ES19880000156	19880122
ES2012581 AF	19900401	ES19880003901	19881222
ES2015426 AF	19900816	ES19890002590	19890721
FI884354 A	19880922	FI19880004354	19880922
FI884354 A0	19880922	FI19880004354	19880922
FI892499 A	19890523	FI19890002499	19890523
FI892499 A0	19890523	FI19890002499	19890523
JP2502814 T2	19900906	JP19880507099T	19880722
MX173559 B	19940316	MX19890015415	19870929
NO884196 A	19881109	NO19880004196	19880922
NO884196 A0	19880922	NO19880004196	19880922
NO891977 A	19890728	NO19890001977	19890518
NO891977 A0	19890518	NO19890001977	19890518
NZ223134 A	19890829	NZ19880223134	19880108
PT86607 A	19890130	PT19880086607	19880122
PT89330 A	19890914	PT19880089330	19881222
PT91227 A	19900208	PT19890091227	19890720
PT91227 B	19950706	PT19890091227	19890720
US4804106 A	19890214	US19880147267	19880122
US4848623 A	19890718	US19770232837	19770628
US5038956 A	19910813	US19890382624	19890426
WO8805405 A1	19880728	WO1987US00102	19870123

WO8805406 A1	19880728	WO1987US02649	19870929	
WO8805407 A1	19880728	WO1987US03418	19871223	
WO8902853 A1	19890406	WO1988US02475	19880720	
WO8902854 A1	19890406	WO1988US02512	19880722	
ZA8800247 A	19880629	ZA19880000247	19880114	
ZA8809319 A	19890927	ZA19880009319	19881213	
ZA8904521 A	19900328	ZA19890004521	19890614	

Probable Assignee: VOUGHT AIRCRAFT IND INC

Assignee(s):(std)**:** BRAY JAMES A ; DALRYMPLE WILLIAM H ; SAUNDERS WILLIAM T ; SAUNDERS W T ; MEERDO ROBERT ; WEIRTON STEEL CORP

Assignee(s): VOUGHT AIRCRAFT IND INC ; SAUNDERS WT ; WEIRTON STEEL A CORP OF DE CORP ; WILLIAM T SAUNDERS ; VOUGHT AIRCRAFT IND ; ISG TECHNOLOGIES INC ; ISG WEIRTON INC

Inventor(s):(std)**:** BRAY J A ; BRAY JAMES A ; DALRYMPLE W H ; DALRYMPLE WILLIAM H ; SAUNDERS W T ; SAUNDERS WILLIAM T ; SAUNDERS WILLIAM THOMAS ; MEERDO R ; MEERDO ROBERT ; WILLIAM THOMAS SAUNDERS

Inventor(s): ROBERT MEERDO ; WILLIAM H DALRYMPLE ; WILLIAM T SAUNDERS ; JAMES A BRAY

Agent(s): SPRUSON AND FERGUSON; BORDEN LADNER GERVAIS LLP

Designated states: AT AU BB BE BG BJ BR CF CG CH CM DE DK FI FR GA GB HU IT JP KP KR LI LK LU MC MG ML MR MW NL NO RO SD SE SN SU TD TG US

International class (IPC 8–9): B21D39/00 B21D51/38 B21D53/00 B23P11/00 B65D17/30 B65D17/34 B65D17/40 B65D17/44 B65D47/36 H04N7/167 (Advanced/Invention);
H04N7/167 (Advanced/Non–invention);
B21D51/38 B65D17/28 H04N7/167 (Core/Invention);
B21D B65D (Subclass/Invention)

International class (IPC 1–7): B21D39/00 B21D53/00 B23K13/00 B23P11/00 B65D17/00 B65D17/30 B65D17/34 B65D17/40 B65D17/42 B65D17/44 B65D17/46 B65D17/48 B65D47/36

CPC: B21D51/383 B65D17/163 B65D2517/0079

European class: B21D51/38B B65D17/16B1 L65D517/00Y7C3

US class: 220/270 220/271 220/273 220/276 220/90.6 413/12 413/14 413/17

Classification Explorer

Cited documents: USRE30349 E, US4848623 A, US4804106 A, US4511299 A, US4406378 A, US4386713 A, US4289250 A, US4182460 A, US4159061 A, US4116361 A, US4116360 A, US4052949 A, US4044915 A, US4019648 A, US4014455 A, US3941277 A, US3939787 A, US3884382 A, US3875884 A, US3874553 A, US3838788 A, US3833144 A, US3813001 A, US3781972 A, US3696961 A, US3684126 A, US3544025 A, US3527378 A, US3404799 A, US3247997 A, US3204812 A, US3195767 A, US3186582 A, US2801765 A, JP55020590 U1, JP53043349 A2, JP47044077 A2, FR1414662 A, FR1414660 A, CH517025 A, CH513748 A,

Forward Citations: WO9813268, WO9742088, WO9400353, WO9213766, WO9118796, WO17020101, WO16026013, WO10012947, WO10012947, WO09002715, WO09002715, WO08098761, WO08063962, WO08034801, WO07143348, WO06090525, WO0121493, USD695611, USD653109, USD520358, US9550604, US9540137, US9371152, US9181007, US9010561, US8978915, US8973780, US8931660, US8904843, US8875936, US8733576, US8727169, US8684211, US8534485, US8505765, US8371467, US8328492, US8313004, US8235244, US8205477, US8191726, US8109405, US8104319, US8052005, US8011527, US7975520, US7942285, US7938290, US7922025, US7743635, US7721906, US7644833, US7614520, US7556168, US7493790, US7350392, US7174762, US7147122, US7147122, US7143623, US7107810, US7036348, US7004345, US6772900, US6688832, US6685417, US6428261, US6425721, US6401956, US6386813, US6234337, US6126029, US5950858, US5934498, US5755134, US5749488, US5749257, US5713481, US5688094, US5671860, US5667349, US5462396, US5328313, US5284045, US5232114, US5224618, US5217134, US5190149, US5174706, US5146957, US5125212, US5123461, US5038956, US2012292329, US2012125933, US2012118891, US2011204055, US2011031256, US2010243663, US2010032433, US2010021270, US2009269169, US2009266824, US2009180999, US2009127264, US2009120943, US2009039091, US2009020543, US2008314906, US2008257900, US2008197132,

US2008110888, US2008067174, US2008067171, US2008050207, US2008017640, US2007278230, US2006237459, US2006113306, US2006096994, US2006071005, US2006060582, US2005199627, US2005044921, US2005044920, US2005006388, US2004211780, US2004200838, US2004099665, US2004065663, US2003116574, US2003042258, US2003001788, US2002172578, TWI374838, JP2006232306, FR2636307, EP2186739, EP2160332, EP2160332, EP2149502, EP1958882, EP1854729, EP0929451, EP0733556, EP0693429, EP0673844, EP0486682, EP0486672, EP0372687, DE19833492, CN104174783, CN104174783, CN103619716, CN103619716, AU2005328082, AU2001247691,

Abstract:
Source: US4804106A A full−open, disc−removal, convenience−feature end wall closure with raw edge metal protection and improved easy−open features includes a peripherally−located scoreline defining the disc to be removed, a back scoreline located within the disc and a longitudinally rigid (non−lanced) opener made integral with the disc by a rivet. A multi−layer fold of sheet metal contiguous to the peripheral scoreline shields residual scoreline metal which remains with the disc. The back scoreline includes a central vent portion and a pair of legs extending, one each from such central portion, on opposite sides of the rivet, toward the adjacent portion of the peripheral scoreline so that, after rupture of the vent portion of the back scoreline, rupture of the back scoreline legs tends to move the opener in a radial direction; radially−directed movement is controlled and the working end of the opener is turned inwardly, in relation to a container, and toward a prescribed location with respect to the peripheral scoreline so as to facilitate initial rupture. The remainder of the peripheral scoreline is severed by continuing arcuate movement of the handle end of the opener which places the handle end radially outboard of the container for lever action opening using the chime seam as a fulcrum.

0) US4524646A – TAB CAN OPENING TOOL

54) Family number: 4789672 (US4524646A) © PatBase

Title: TAB CAN OPENING TOOL

Priority: US19830463598 19830602

Family:

Publication number	Publication date	Application number	Application date
US4524646 A	19850625	US19830463598	19830602

Probable Assignee: KIMBERLIN JR FRED

Assignee(s):(std)**:** KIMBERLIN JR FRED

Inventor(s):(std)**:** KIMBERLIN JR FRED

International class (IPC 8–9): B67B7/40 (Advanced/Invention); B67B7/00 (Core/Invention)

International class (IPC 1–7): B67B7/40

CPC: Y10S7/901 B67B7/403

European class: B67B7/40B

US class: 7/901 81/3.55 81/355

Classification Explorer

Cited documents: US4373246 A, US4371021 A, US4309921 A, US4257287 A, US4253352 A,

Forward Citations: WO04065282, WO04002873, US8870012, US8695457, US8496069, US8434563, US8156626, US6219869, US5947317, US5771759, US5555778, US5509380, US5337632, US5267945, US5107728, US5079791, US4899050, US4873896, US4864898, US4712454, US4663994, US4617842, US2011314968, US2011209886, US2009090716, GB2288161,

Abstract:
Source: US4524646A A hand–held tool for opening tab open cans. The tool includes an elongated body having an opening with converging surfaces which can be slipped over the tab. A narrow edge at the lower margin of the opening assists initially in lifting the tab away from the can end. As the tool is pivoted upwardly, a chisel–shaped nose portion on the front end of the tool assists in pressing the weakened portion of the can end inwardly. The relationship between the tool nose portion and the thin edge prevents interference between the nose portion and the can end when the tool is initially slipped onto the tab.

0) WO06082464A1 – CAN END WITH TAB RETAINED BY CHEMICAL ADHESIVE ...

55) Family number: 40730770 (WO06082464A1) © PatBase

Title: CAN END WITH TAB RETAINED BY CHEMICAL ADHESIVE MEMBER

Priority: EP20050702439 20050207 WO2005IB00296 20050207

Family:

Publication number	Publication date	Application number	Application date
AT486018 E	20101115	AT20050702439T	20050207
DE602005024446 D1	20101209	DE200560024446T	20050207
EP1846301 A1	20071024	EP20050702439	20050207
EP1846301 B1	20101027	EP20050702439	20050207
EP1846301 B2	20140618	EP20050702439	20050207
WO06082464 A1	20060810	WO2005IB00296	20050207

Probable Assignee: REXAM BEVERAGE CAN EUROP LTD

Assignee(s):(std)**:** REXAM BEVERAGE CAN EUROP LTD ; THIBAUT MICHEL ; REXAM BEVERAGE CAN EUROPE LTD

Assignee(s): REXAM BEVERAGE CAN EUROPE LIMITED

Inventor(s):(std)**:** THIBAUT MICHEL

Agent(s): DUNLOP BRIAN KENNETH CHARLES; LAMBERT IAN ROBERT

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B65D17/32 (Advanced/Invention); B65D17/28 (Core/Invention)

CPC: B65D17/165 B65D2517/0014

European class: B65D17/16B2 L65D517/00Y2C

Classification Explorer

Cited documents: WO04065236 A1, WO0228739 A2, US3593877 A, US3463107 A, US3370744 A, EP0639507 A1,

Abstract:
An end closure (10) for a container has a central panel wall (12) with a product side and a public side. A displaceable tear (20) panel (20) is in the central panel wall, and is at least substantially defined by a frangible score (22) and a non–frangible hinge segment (24). The end closure also has a tab (26) attached to the public side of the central panel wall at a location spaced apart from the tear panel. At least a nose (30) portion of the tab extends over a portion of the tear panel. A lift end (32) of the tab is opposite the tab nose. A central webbing (42) of the tab is between the nose and the lift end. A chemical adhesive (60) located on the end closure to inhibit rotation of the tab. The chemical adhesive is located on the public side of the central panel wall or on the tab.

0) US3550546A – APPARATUS FOR MAKING EASY–OPENING CAN ENDS

56) Family number: 935333 (US3550546A) © PatBase

Title: APPARATUS FOR MAKING EASY–OPENING CAN ENDS

Priority: US19680719615 19680408

Family:

Publication number	Publication date	Application number	Application date
US3550546 A	19701229	US19680719615	19680408

Probable Assignee: FRAZE ERMAL C

Assignee(s):(std)**:** FRAZE ERMAL C

Assignee(s): ERMAL C FRAZE

Inventor(s):(std)**:** EICKENHORST FRANKLIN C

Inventor(s): FRANKLIN C EICKENHORST

International class (IPC 8–9)**:** B21D51/38 (Advanced/Invention); B21D51/38 (Core/Invention)

International class (IPC 1–7)**:** B21D51/44

CPC: B21D51/383

European class: B21D51/38B

US class: 413/64 413/66

Classification Explorer

Forward Citations: WO8906575, USRE33061, US5967960, US5182934, US5017072, US4936729, US4799846, US4723882, US4714814, US4640116, US4568230, US4140072, US4026226, US3964414, US3683834, EP0542310, EP0281777, EP0161651, DE3736513,

Abstract:
Source: US3550546A (Claim 1) 1. In a machine for converting can ends into easy–opening can ends, the combination of.– supporting structure; single rotatable dial plate mounted for rotary movement on said supporting structure about a generally vertical axis, said dial plate having a plurality of spaced can end receiving areas thereon; means at each of said can end receiving areas for supporting a can end; a plurality of work stations located around said dial plate including a load station, an unload station and a staking station; intermitter means located entirely beneath said rotatable dial plate for imparting intermittent rotary motion to said dial plate about said axis with sai–d dial plate stopping intermittently with said can end receiving areas at said stations, respectively; means at said load station for automatically sequentially supplying a single can end to each of said can end receiving areas as such can end receiving area stops at said load station; ram positioned above said rotatable dial plate and movable generally vertically toward and away from said rotatable dial plate; motor for driving said ram; tooling means driven by said ram at one of said work stations for forining a hollow rivet in each of the can ends moved therethrough by said dial plate; a tab die mounted on said suppor–ting structure and driven by said ram for forming tabs of the type usable on easyopening container with each of the tabs being joined to a connecting strip and having a connecting aperture therein; tab feed means for sequentially feeding the tab and the strip to the staking station with each tab sequentially entering said staking station; means at said staking station driven by said motor for cutting the tab at the staking station from the strip and positioning it on the can end with the rivet projecting through the aperture in the tab, said last mentioned means including means for staking the rivet to clamp the tab to the can end; and means at said unload station for removing the can ends having tabs affixed thereto from the rotatable dial plate.

0) US2785281A – CAN OPENING KEY SOLDERING MACHINE

57) Family number: 22693614 (US2785281A) © PatBase

Title: CAN OPENING KEY SOLDERING MACHINE

Priority: US19530391034 19531109

Family:

Publication number	Publication date	Application number	Application date
US2785281 A	19570312	US19530391034	19531109

Probable Assignee: AMERICAN CAN CO

Assignee(s):(std)**:** AMERICAN CAN CO

Assignee(s): AMERICAN CAN COMPANY

Inventor(s):(std)**:** HEINLE CARL W ; KARL BOFINGER ; NORDQUIST ROUALD E J

Inventor(s): BOFINGER KARL

International class (IPC 8–9): B23K1/00 (Advanced/Invention); B23K1/00 (Core/Invention)

International class (IPC 1–7): B23K1/12

CPC: B23K1/0004

European class: B23K1/00M

US class: 219/85.19 228/101

Classification Explorer

Cited documents: US2338002 A, US2231408 A, US2002105 A, US1922916 A, US1890262 A, US1884683 A, US1861970 A, US1773892 A, US1743519 A, US1699091 A, US1635536 A, US1536838 A, US1264611 A, US1142306 A,

Forward Citations: US3543385,

Abstract:
Source: US2785281A (Claim 1) In a machine for attaching solder carrying opening keys to can ends, the combination of a support for a can end having an opening key loosely superimposed thereon, a soldering head disposed adjacent said support, a pair of spaced and parallel slide members yieldably mounted in said head and separately connected with a source of electric current, a pair of rotary electrodes disposed in laterally spaced relation for cdgewise engagement simultaneously against a single face of said key, said electrodes being mounted rotatably one in each of said slide members, pressure means acting against each of said electrodes for retaining them in electrical contact with their slide members, means for effecting relative movement between said head and said support for yieldably engaging said electrodes against said single face of said key to heat said key through electrical resistance to melt said solder and effect a bond between said key and said can end, and means for rotating said electrodes through partial stepped rotations after each soldering operation.

0) US3424118A – CONVERSION PRESS APPARATUS FOR CAN TREATING

58) Family number: 55615 (US3424118A) © PatBase

Title: CONVERSION PRESS APPARATUS FOR CAN TREATING

Priority: US19660519025 19660106

Family:

Publication number	Publication date	Application number	Application date
BE690453 A	19670502		19661130
BR6685665 A0	19730906	BR19660185665	19661223
CH467117 A	19690115	CH19660017249	19661202
DE1552098 A1	19700108	DE19661552098	19661230
DE1552098 B2	19730628	DE19661552098	19661230
DE1552098 C3	19740117	DE19661552098	19661230
FR1506888 A	19671222	FR19660089248	19661228
GB1135122 A	19681127	GB19660057002	19661220
NL6700007 A	19670707	NL19670000007	19670102
SE366927 B	19740513	SE19670000196	19670104
US3424118 A	19690128	US19660519025	19660106

Probable Assignee: STOLLE CORP

Assignee(s):(std)**:** STOLLE CORP

Assignee(s): STOLLE CORP SIDNEY OHIO V ST A ; STOLLE CORP US

Inventor(s):(std)**:** ELTON GEORGE KAMINSKI ; G KAMINSKI ELTON ; KAMINSKI E ; KAMINSKI ELTON G ; LEBANON STOLLE RALPH J ; RALPH JOHN STOLLE ; STOLLE R ; STOLLE RALPH J

Inventor(s): STOLLE RALPH J LEBANON ; ELTON G KAMINSKI ; STOLLE R US ; RALPH J STOLLE ; KAMINSKI ELTON G SIDNEY ; KAMINSKI E US ; GEORGE KAMINSKI ELTON ; JOHN STOLLE RALPH

International class (IPC 8–9): B21D51/26 B21D51/38 (Advanced/Invention); B21D51/26 B21D51/38 (Core/Invention)

International class (IPC 1–7): B21D43/14 B21D51/10 B21D51/26 B21D51/44 B65D17/00

CPC: B21D51/26 B21D51/383

European class: B21D51/26 B21D51/38B

US class: 413/54

Classification Explorer

Cited documents: US3191354 A,

Forward Citations: WO15084626, US4535615, US4034692, US3683834, US2016271679, DE2725188, CN105992659,

Abstract:
Source: US3424118A ABSTRACT OF THE DISCLOSURE A can treating machine for performing a pluraiity of opérations on can bodies, each can body having an intégral end with a rivet member thereon, comprising three rotating drums, each drum having a pluraiity of mandrels on its face at various intermediate locations. The drums are indexed by mechanical means such that the mandrels travel intermittently through various stations at which can finishing opérations are performed. A conveyor belt travels intermittently and parallel with the drums and aids in the expeditious delivery of the can bodies to the mandrels on the drums. Means are associated with two of the drums to .perforai trimming opérations on depend–ing can body edges and polishing opérations on the entire can or any desired portion thereof. The can bodies then proceed to the third drum where they are positioned on the mandrels thereof and the opérations of doming, Hang–ing, prescoring, depth scoring, coining and placing and staking the pull key are performed. The can bodies are then discharged.

0) US2015151303A – BALE PROCESSOR AND FLAIL FOR USE WITH SAME

59) Family number: 59144194 (US2015151303A) © PatBase

Title: BALE PROCESSOR AND FLAIL FOR USE WITH SAME

Priority: US20130898037P 20131031 US20140077142P 20141107 US20140290558 20140529 US20140955078P 20140318 US20140088278P 20141205 US20150222682P 20150923 US20150616489 20150206 WO2014US54113 20140904 WO2014US63336 20141031 US20150725302 20150529 WO2015US21327 20150318 US20160087844 20160331 US20160142231 20160429

Family:

Publication number	Publication date	Application number	Application date
AU2014342154 AA	20150507	AU20140342154	20141031
AU2015231297 AA	20150924	AU20150231297	20150318
CA2862962 AA	20151129	CA20142862962	20140911
CA2889289 AA	20151129	CA20152889289	20150424
CN105813796 A	20160727	CN201480068409	20141031
CN106102976 A	20161109	CN201580014509	20150318
DE112015001324 T5	20170105	DE201511001324T	20150318
EP3062955 A1	20160907	EP20140856830	20141031
US2015151303 AA	20150604	US20150616489	20150206
US2015266124 AA	20150924	US20150725302	20150529
US2015342122 AA	20151203	US20140290558	20140529
US2016288239 AA	20161006	US20160087844	20160331
US2016318282 AA	20161103	US20160142231	20160429
US9321117 BB	20160426	US20150725302	20150529
WO15066418 A1	20150507	WO2014US63336	20141031
WO15143081 A1	20150924	WO2015US21327	20150318
WO15183333 A1	20151203	WO2014US54113	20140904
WO16073919 A1	20160512	WO2015US59577	20151106

Probable Assignee: VERMEER MFG CO

Assignee(s):(std)**:** VERMEER MFG CO ; VERMEER MFG CO INC

Assignee(s): SCHIFERL TYLER ; STAM PHIL ; MUSHITZ LUKE ; MUCHTAR WANTI ; EGGING PHIL ; GRAHAM LUCAS ; JOHNSON BJORN ; LANDON DAVID

Inventor(s):(std)**:** BEARY SCOTT W ; EGGING PHIL ; GRAHAM LUCAS ; JOHNSON BJORN ; LANDON DAVID ; MUCHTAR WANTI ; MUSHITZ LUKE ; PROFFITT MICHAEL J ; SCHIFERL TYLER ; STAM PHIL ; WEINBERG CLINT A

Agent(s): FREEHILLS PATENT ATTORNEYS; FPA PATENT ATTORNEYS PTY LTD; RICHES MCKENZIE AND HERBERT LLP; STIPPL HUBERT; LATHROP AND GAGE LLP; ANIS HISSAN ET AL; JONAS TAMALA R ET AL; POPLIN JUSTIN A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A01D87/00 A01F15/08 A01F29/00 A01F29/10 A23N17/00 B02C13/28 B02C13/288 B23K11/00 B23K26/00 B23K35/24 B23K35/30 B23K9/00 B23K9/04 B23K9/32 B32B15/01 C22C38/00 (Advanced/Invention)

CPC: B02C13/28 A01F29/005 B23K35/308 A01K5/002 A01K5/005 A01F29/10 A01D87/0007 B23K35/0255 B23K35/0261 B23K35/0272 B23K35/30 B23K35/3053 B23K35/306 B23K9/324 B23K9/04 B32B15/011 B32B2307/536 B32B2307/208 C22C38/58 C22C38/001 C22C38/002 C22C38/02 C22C38/42 C22C38/46 B23K35/327 C22C38/44 B23K35/24 B23K26/34

US class: 1/1 219/76.14 241/154 241/195 241/27 241/97 428/545

Classification Explorer

Cited documents: WO13112841 A1, WO13087422 A1, WO13066287 A1, WO12173611 A1, WO12120819 A1, WO10147726 A1, WO04075632 A1, WO0236238 A1, US9114 A, US8800903 BA, US8721761 BB, US8698038 BB, US8623525 BB, US8586214 BB, US8545997 BB, US8450637 BB, US8430980 BB, US8322466 BB, US8293386 BB, US8231072 BB, US8221203 BA, US8181592 BB, US8099929 BB, US8096406 BA, US8074750 BB, US7757836 BB, US7703411 BA, US7621477 BB, US7487868 BB, US7262240 BA, US7104394 BB, US6699121 BB, US6692351 BB, US6659267 BB, US6649682 BA, US6631799 BB, US6481654 BA, US6478674 BB, US6464157 BA, US6419173 BB, US6392190 BA, US6131838 A, US6079649 A, US5967436 A, US5874707 A, US5873326 A, US5683599 A, US5587572 A, US5552575 A, US5482508 A, US5321224 A, US5293026 A, US5272861 A, US5232405 A, US5042973 A, US5010225 A, US4782206 A, US4779810 A, US4046285 A, US3964601 A, US3929296 A, US3915392 A, US3863850 A, US3680797 A, US3596041 A, US3208491 A, US2841687 A, US2753908 A, US2752160 A, US2014345800 AA, US2014054273 AA, US2013294819 AA, US2013273258 AA, US2013266798 AA, US2013252023 AA, US2013206483 AA, US2013105277 AA, US2012325779 AA, US2011120977 AA, US2011068152 AA, US2011042498 AA, US2010323213 AA, US2010236834 AA, US2010215849 AA, US2010141027 AA, US2010112375 AA, US2010065337 AA, US2009321546 AA, US2009074985 AA, US2007023554 AA, US2006255019 AA, US2006207803 AA, US2004238666 AA, US2003068518 AA, US2002169011 AA, US2001006199 AA, US1787526 A, KR100956318 B1, KR100247298 B1, JP2002346409 A2, JP2000141037 A2, GB778785 A, GB190300301 A, EP0753375 A2,

Forward Citations: WO17080741, US2016107168, US2015327441, CN105660061,

Abstract:
Source: US2015151303A In one embodiment, a bale processor includes a hopper for receiving baled material, a discharge opening for outputting chopped material, and primary and secondary rotors. The primary rotor has an axis of rotation and a rotatable flail to chop the material from the bale received in the hopper. The secondary rotor is rotatable to chop the material after being chopped by the primary rotor, and the secondary rotor is offset from the primary rotor such that the primary rotor is between the secondary rotor and the discharge opening. The flail includes a pivot tube for rotating about the axis, first and second hammers secured to the pivot tube, and a paddle. The paddle is positioned between and secured to the first and second hammers to generate airflow when the first and second hammers are rotated at an operating speed, thereby increasing a throw distance of the chopped material.

0) US2001021869A – APPARATUS AND METHOD FOR COUPLING THERAPEUTIC A...

60) Family number: 28428312 (US2001021869A) © PatBase

Title: APPARATUS AND METHOD FOR COUPLING THERAPEUTIC AND/OR MONITORING EQUIPMENT TO A PATIENT

Priority:

US19990451547	19991201	US19990451795	19991201	US19990451796	19991201
US19990452663	19991201	US19990452508	19991201	US19990451799	19991201
US19990452510	19991201	US19990451800	19991201	US19990452477	19991201
WO2000US32559	20001130	US20010928044	20010811	US20000667183	20000921
US20000751382	20001229	US20000666931	20000921	US20020291857	20021108
US20020306910	20021126	WO2002US25551	20020809	US20040994372	20041123

Family:

Publication number	Publication date	Application number	Application date
AT276008 E	20041015	AT20000982292T	20001130
AT389434 E	20080415	AT20020759333T	20020809
AU200119346 A5	20010612	AU20010019346	20001130
AU2002324675 AA	20030303	AU20020324675	20020809
AU2002324675 BB	20071004	AU20020324675	20020809
AU782944 B2	20050908	AU20010019346	20001130
CA2393104 AA	20020529	CA20002393104	20001130
CA2393104 C	20040817	CA20002393104	20001130
CA2456760 AA	20040210	CA20022456760	20020809
CN100368035 C	20080213	CN20028017849	20020809
CN1553821 A	20041208	CN20028017849	20020809
DE60013893 D1	20041021	DE20006013893	20001130
DE60013893 T2	20050203	DE20006013893T	20001130
DE60225696 D1	20080430	DE20026025696	20020809
EP1237619 A1	20020911	EP20000982292	20001130
EP1237619 B1	20040915	EP20000982292	20001130
EP1418979 A2	20040519	EP20020759333	20020809
EP1418979 B1	20080319	EP20020759333	20020809
ES2226955 T3	20050401	ES20000982292T	20001130
HK1071858 A1	20080613	HK20050104680	20050603
HK1071858 A3	20050805	HK20050104680	20050603
JP2003527891 T2	20030924	JP20010541558T	20001130
JP2004538107 T2	20041224	JP20030520820T	20020809
JP4194039 B2	20081210	JP20030520820T	20020809
KR20040058175 A	20040703	KR20047002080	20020809
US2001021869 AA	20010913	US20000751382	20001229
US2003135241 AA	20030717	US20020291857	20021108
US2003195599 AA	20031016	US20010928044	20010811
US2004015206 AA	20040122	US20020306910	20021126
US2005096717 AA	20050505	US20040994372	20041123
US6493592 BA	20021210	US19990451795	19991201
US6516226 BA	20030204	US19990452510	19991201
US6522927 BA	20030218	US19990451800	19991201
US6529776 BA	20030304	US20000666931	20000921
US6539264 BA	20030325	US19990451547	19991201
US6542780 BA	20030401	US20000667183	20000921
US6549797 BA	20030415	US19990451796	19991201
US6549810 BA	20030415	US19990452508	19991201

US6556869 BA	20030429	US19990451799	19991201	
US6560491 BA	20030506	US19990452663	19991201	
US6622051 BA	20030916	US19990452477	19991201	
US6904324 BB	20050607	US20010928044	20010811	
US6912424 BB	20050628	US20000751382	20001229	
US7118555 BB	20061010	US20020291857	20021108	
WO0139829 A1	20010607	WO2000US32559	20001130	
WO0139829 A2	20010607	WO2000US32559	20001130	
WO0139829 A3	20020523	WO2000US32559	20001130	
WO0139829 C1	20020627	WO2000US32559	20001130	
WO03015867 A2	20030227	WO2002US25551	20020809	
WO03015867 A3	20031106	WO2002US25551	20020809	

Probable Assignee: MEAGAN MEDICAL INC

Assignee(s):(std)**:** BISHAY JON M ; LEONARD PAUL C ; LEYDE KENT W ; MEAGAN MEDICAL INC ; MEAGEN MEDICAL INC ; VERTIS NEUROSCIENCE INC

Assignee(s): NORTHSTAR NEUROSCIENCE INC ; MIAZGA JAY M

Inventor(s):(std)**:** BISHAY JON ; BISHAY JON M ; JON BISHAY ; JON M BISHAY ; KENT W LEYDE ; LEONARD PAUL C ; PAUL C LEONARD ; MIAZGA JAY M ; LEYDE W ; LEYDE KENT W ; LEONARD PAUL ; LEONARD C ; BISHAY M

Inventor(s): MIAZGA JAY

Agent(s): SPRUSON AND FERGUSON; ASPEN PHARMA PTY LTD; PIZZEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; OYEN WIGGS GREEN AND MUTALA LLP; KIRBY EADES GALE BAKER; GRUENECKER KINKELDEY STOCKMAIR AND SCHWANHAEUSSER ANWALTSSOZIETAET; BLANK ROME LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class(IPC 8–9)**:** A61H39/00 A61H39/08 A61M5/32 A61N1/00 A61N1/04 A61N1/05 A61N1/32 A61N1/34 A61N1/36 (Advanced/Invention); A61N1/00 A61N1/04 A61N1/32 (Advanced/Non–invention); A61H39/00 A61M5/32 A61N1/04 A61N1/05 A61N1/32 (Core/Invention); A61N (Subclass/Invention)

International class(IPC 1–7)**:** A61H39/00 A61H39/08 A61N1/00 A61N1/02 A61N1/04 A61N1/05 A61N1/18 A61N1/32 A61N1/34 A61N1/36

CPC: A61N1/05 Y10S128/907 Y10S128/26 A61N1/0502 A61N1/0551 A61N1/36017 A61N1/36021 A61N1/375

European class: A61N1/05 A61N1/05L A61N1/36E4 K61N1/36E K61N1/36E2

US class: 128/907 128/DIG.26 600/372 604/198 606/129 607/115 607/116 607/116P 607/142 607/142S 607/145 607/149 607/149S 607/150 607/2 607/2P 607/46 607/48 607/48P

Classification Explorer

Cited documents: WO0139829 A1, USD480478, USD443063 S1, USD357069 S1, USD318330 S1, USD297047 S1, US6599272 BA, US6566869, US6560491 BA, US6556869 BA, US6552927 BB, US6549810 BA, US6549797 BA, US6542780, US6539264 BA, US6522927 BA, US6516226 BA, US6493593 BA, US6493592 BA, US6439592, US6355021 BA, US6341237 BA, US6304785 BA, US6269270 BA, US6219569 BA, US6208893 BA, US6122547 A, US6117077 A, US6068650 A, US6050992 A, US6035236 A, US6032064 A, US6009347 A, US5968063 A, US5968011 A, US5948008 A, US5941845 A, US5928144 A, US5873849 A, US5861015 A, US5861002 A, US5851223 A, US5810762 A, US5702359 A, US5682233 A, US5674267 A, US5649936 A, US5593429 A, US5449378 A, US5439440 A, US5423314 A, US5417719 A, US5332401 A, US5281218 A, US5269304 A, US5255691 A, US5246014 A, US5211175 A, US5117826 A, US5094242 A, US5064486 A, US5054486 A, US5036850 A, US5033474 A, US5012811 A, US4979508 A, US4953564 A, US4949734 A, US4934371 A, US4895154 A, US4765310 A, US4712558 A, US4686996 A, US4685466 A, US4583549 A, US4556064 A, US4541432 A, US4512351 A, US4437467 A, US4431000 A,

US4408617 A, US4381012 A, US4284856 A, US4281659 A, US4262672 A, US4256116 A, US4207903 A, US4153059 A, US4139011 A, US3983881 A, US3943935 A, US3938526 A, US3208452 A, US3090151 A, US3030959 A, US29130210, US09667183, US09452663, US09452510, US09452508, US09451800, US09451799, US09451796, US09451795, US09451547, GB2255719 A1, GB2163355 A1, FR2500745 A1, FR2500309 A3,

Forward Citations: WO17001773, WO16069364, WO13116377, WO12046231, WO12046231, WO11146526, WO10143164, WO10143164, WO09088563, WO08028063, WO05053530, WO04017148, WO03026736, WO03026735, WO03026735, WO03026734, WO03026734, WO03015867, WO03015867, USRE43009, USRE42835, USRE42277, USRE42016, USD766447, USD744659, USD717955, USD707838, USD631154, USD630321, USD558882, US9655538, US9655537, US9642552, US9642537, US9636068, US9630003, US9630001, US9619660, US9615763, US9598691, US9572976, US9572534, US9554715, US9545228, US9545204, US9532737, US9521968, US9517344, US9504423, US9486621, US9480846, US9480421, US9465420, US9440069, US9433380, US9433367, US9414881, US9409020, US9408551, US9408545, US9403020, US9403008, US9402570, US9402544, US9364660, US9364155, US9364149, US9358388, US9351669, US9345891, US9345414, US9332933, US9308382, US9283051, US9265941, US9265453, US9254379, US9216294, US9215992, US9205255, US9198733, US9192717, US9186098, US9179875, US9173704, US9114248, US9084872, US9069536, US9056194, US9037477, US9031630, US9011502, US9005189, US8992517, US8965482, US8956330, US8938287, US8926606, US8915949, US8909353, US8880138, US8876755, US8862198, US8852101, US8814860, US8812114, US8805519, US8802006, US8785196, US8774925, US8764657, US8753335, US8751144, US8750956, US8744549, US8706252, US8688211, US8666487, US8662901, US8657788, US8647338, US8634929, US8626277, US8617069, US8613892, US8613709, US8613708, US8603087, US8602991, US8597188, US8571687, US8545403, US8543183, US8467875, US8465484, US8463383, US8433386, US8414509, US8396556, US8386052, US8382680, US8364277, US8348921, US8340779, US8298222, US8282631, US8252229, US8251986, US8231603, US8195304, US8165692, US8162918, US8152769, US8121696, US8114070, US8086318, US8086292, US8082035, US8048067, US8046082, US8029441, US7979103, US7962206, US7955827, US7938981, US7938824, US7931615, US7892216, US7883464, US7840272, US7826879, US7822455, US7819826, US7813809, US7801582, US7797046, US7797041, US7765010, US7761167, US7744570, US7744568, US7718409, US7697967, US7674249, US7668598, US7660637, US7571002, US7536226, US7493178, US7407491, US7376467, US7340309, US7331939, US7314463, US7311694, US7309326, US7308318, US7300419, US7297138, US7267676, US7228180, US7211083, US7200444, US7155287, US7120499, US7118555, US7104965, US7104801, US7018384, US6937892, US6912424, US6904324, US2015223894, US2013345782, US2013237790, US2013211225, US2011217775, US2011184258, US2011151421, US2011144464, US2011105876, US2011092884, US2011082515, US2011046465, US2010324621, US2010324570, US2010274515, US2010268166, US2010249565, US2010247775, US2010230285, US2010137939, US2010114259, US2010100158, US2010099966, US2010076291, US2010076290, US2010076289, US2010076280, US2010036445, US2009292188, US2009264825, US2009257911, US2009182403, US2009182402, US2009182401, US2009105706, US2009105569, US2009076359, US2009064867, US2009048504, US2008319296, US2008319295, US2008312598, US2008188779, US2008154335, US2008154334, US2008114280, US2008091256, US2008091248, US2008065182, US2008039915, US2008033510, US2008033492, US2008033269, US2008009929, US2007293918, US2007293917, US2007288078, US2007260290, US2007256312, US2007249922, US2007203407, US2007185455, US2007185454, US2007185441, US2007162088, US2007123952, US2007078321, US2007078320, US2007066995, US2007032837, US2007032836, US2007027381, US2007016268, US2007004990, US2006293724, US2006276760, US2006270992, US2006270990, US2006224119, US2006223408, US2006211991, US2006211990, US2006206164, US2006199400, US2006079946, US2006005844, US2005187591, US2005187581, US2005182457, US2005182455, US2005177201, US2005171576, US2005165459, US2005149145, US2005096717, US2005049664, US2005049663, US2004186466, US2004172115, US2004147996, US2004147995, US2004138620, US2004044390, US2004044348, US2004015188, US2003233124, US2003195599, US2003135241, US2003074030, US2003065369, US2001021869, KR101017795, KR100995108, JP2013538643, JP2013085953, JP2011115347, GB2423022, GB2423020, FR3038225, EP2624908, EP2493665, EP2493665, EP2066398, EP1618921, EP1618920, EP1616596, EP1578486, EP1578485, EP1418979, AU2007289146, AU2002334748, AU2002324675, AU2001296721, AU2001296721,

Abstract:
Source: US2001021869A A method and apparatus for supporting couplers for therapy administration and/or monitoring. The apparatus can include a support member configured to rest on a body of a recipient proximate to

a coupling area. The support member can include a first coupler location configured to removably carry a first coupler proximate to a first coupling position of the body of the recipient. A second coupler location of the support member is configured to removably carry a second coupler proximate to a second coupling position of the body of the recipient. The first and second coupler locations can be arranged to guide the practitioner to connect the couplers properly to the body. For example, the first coupler location can be positioned closer than the second coupler location to the first coupling position. Accordingly, practitioners can be more likely to connect the first and second couplers to the correct coupling position on the body of the recipient.

0) US3941276A – PULL TAB ANTI–ROTATION MOUNTING

61) Family number: 1244625 (US3941276A) © PatBase

Title: Pull tab anti–rotation mounting

Priority: JP19750106461U 19750731 US19740525427 19741120

Family:

Publication number	Publication date	Application number	Application date
CA1025377 A1	19780131	CA19750225790	19750429
CH587753 A	19770513	CH19750004863	19750416
DE2537874 A1	19760526	DE19752537874	19750826
DE2537874 C2	19830105	DE19752537874	19750826
GB1534703 A	19781206	GB19750046972	19751114
HK18980 A	19800418	HK19800000189	19800410
IT1048698 A	19801220	IT19750029430	19751119
JP51073565 U1	19760609	JP19750106461U	19750731
JP55030821 Y1	19800723	JP19750106461U	19750731
JP55030821 Y2	19800723	JP19750106461U	19750731
JP55080227 U1	19800603	JP19790160497U	19791121
US3941276 A	19760302	US19740525427	19741120
ZA7502361 A	19761124	ZA19750002361	19750414

Probable Assignee: CONTINENTAL CAN CO

Assignee(s):(std): CONTINENTAL GROUP ; CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC ; CONTINENTAL GROUP INC ; PATEL ANILKUMAR U ; THE CONTINENTAL GROUP INC ; THE CONTINENTAL GROUP INC 10017 NEW YORK N Y US

Inventor(s):(std): ANILKUMAR PATEL ; ANILKUMAR U PATEL ; PATEL ANILKUMAR U ; PATEL ANILKUMAR UKABHAI

Inventor(s): PATEL ANILKUMAR UKABHAI SUMMIT ILL ; PATEL ANILKUMAR UKABHAI SUMMIT ILL US ; UKABHAI PATEL ANILKUMAR

International class (IPC 8–9): B65D17/34 B65D17/347 B65D17/35 B65D17/353 B65D41/32 (Advanced/Invention); B65D17/28 B65D41/32 (Core/Invention); B65D B67B (Subclass/Invention)

International class (IPC 1–7): B65D17/00 B65D17/16 B65D17/20 B65D17/22 B65D17/34 B65D41/32 B67B

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/270

Classification Explorer

Cited documents: US3780902 A, US3762596 A, US3734338 A, US3643832 A, US3593877 A, US3446389 A, JP44026559 Y1, DE2264457 A1, DE1657633 A1, DE1607847 A1,

Forward Citations: WO13020706, USD595630, US9242608, US8919796, US8851495, US8727364, US7926675, US7909196, US6951293, US2007062950, US2006016815, US2005252917, US2004140309, JP6003827, JP53161971, EP2557050, DE3909787,

Abstract:
Source: US3941276A An improved pull tab mounting arrangement for an easy open end closure member, characterized by the provision of improved pull tab positioning means for maintaining the pull tab in a desired orientation relative to the flap–defining score line. Two protrusions formed in the closure end panel prevent rotational displacement of the tab about the attachment rivet resulting from contact with the knock out pad during the filling and seaming operations or from improper handling subsequent to filling. The protrusions, which are symetrically disposed with relation to an end panel chord drawn along the axis of the flap, serve as anti–rotation abutments and may further serve as spacing means to prevent contact between the tab and the knockout pad. The protrusions may be disposed abutting the tab legs, interior and tangent to the circle of the interior of the tab

ring or beneath the ring itself. In the last case, the ring is supported on the protrusions, which are nested within the channel formed by the inner and outer curls of the ring, the outer curl projecting into a notch formed in the walls of the protrusions.

0) US5813561A – SANITARY BEVERAGE CAN LID

62) Family number: 15194757 (US5813561A) © PatBase

Title: SANITARY BEVERAGE CAN LID

Priority: US19970808108 19970228 US19980009381 19980120 US19990312836 19990517 US19990312837 19990517 US19980185468 19981113 US19980070056 19980430 WO2000US13447 20000516 WO2000US13400 20000516 US20000695450 20001024 WO1998US03779 19980226 WO1999US09125 19990428

Family:

Publication number	Publication date	Application number	Application date
AU199861869 A1	19980918	AU19980061869	19980226
AU199936674 A1	20001110	AU19990036674	19990428
AU199936674 A5	20001110	AU19990036674	19990428
AU200050190 A5	20001205	AU20000050190D	20000516
AU200055876 A5	20001205	AU20000055876D	20000516
CN1113786 C	20030709	CN19988002910	19980226
CN1156387 C	20040707	CN20008007716	20000516
CN1248948 A	20000329	CN19988002910	19980226
CN1351566 A	20020529	CN20008007716	20000516
EP0979197 A1	20000216	EP19980906719	19980226
EP0979197 A4	20010404	EP19980906719	19980226
EP1194337 A1	20020410	EP20000941125	20000516
EP1194337 A4	20041215	EP20000941125	20000516
EP1196328 A1	20020417	EP20000932471	20000516
EP1196328 A4	20050706	EP20000932471	20000516
JP2002514993 T2	20020521	JP19980537854T	19980226
JP2002544080 T2	20021224	JP20000618166T	20000516
MXPA01011661 A1	20050419	MX2001PA11661	20000516
TW356461 B	19990421	TW19980102307	19980219
TW393426 B	20000611	TW19990106990	19990430
US5813561 A	19980929	US19970808108	19970228
US5934497 A	19990810	US19980070056	19980430
US6247608 BA	20010619	US19990312836	19990517
US6450359 BA	20020917	US20000695450	20001024
WO0064761 A1	20001102	WO1999US09125	19990428
WO0069734 A1	20001123	WO2000US13400	20000516
WO0069735 A1	20001123	WO2000US13447	20000516
WO9838100 A1	19980903	WO1998US03779	19980226

Probable Assignee: CHANG CHARLESUS

Assignee(s):(std)**:** CHANG LUCY ; CHANG LUCY H ; CHANG TA PENG CHARLES ; CHARLES CHANG ; LUCY CHANG ; CHANG CHARLES

Assignee(s): CHANG CHARLESUS

Inventor(s):(std)**:** C CHANG ; CHANG C ; CHANG CHARLES ; CHANG L ; CHANG LUCY ; CHANG LUCY H ; CHANG TA PENG CHARLES ; CHARLES CHANG ; L CHANG ; LUCY CHANG

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

International class (IPC 8–9): B65D17/32 B65D17/34 B65D17/347 B65D17/353 B65D8/04 B65D85/72 (Advanced/Invention); B65D17/28 (Core/Invention);

	B65D17/34 B65D41/32 (Core/Non−invention)
International class (IPC 1−7):	B65D17/32 B65D17/34 B65D17/347 B65D17/353 B65D8/04 B65D85/72
CPC:	Y10S220/906 B65D17/165 B65D2517/0014 B65D2517/0049 B65D2517/0076
European class:	B65D17/16B2 L65D517/00Y2C L65D517/00Y6A L65D517/00Y7C1
US class:	206/508 206/509 220/268 220/269 220/270 220/608 220/609 220/906
Classification Explorer	
Cited documents:	WO9838100 A1, WO9708066 A2, US5934497 A, US5813561 A, US5749488 A, US5743445 A, US5415313 A, US5119955 A, US5108003 A, US4998641 A, US4895270 A, US4784283 A, US4480763 A, US4407425 A, US4394927 A, US4333582 A, US4318493 A, US4266688 A, US4262815 A, US4247014 A, US4114778 A, US4084721 A, US4078695 A, US4051976 A, US4047634 A, US3977561 A, US3967752 A, US3952912 A, US3946895 A, US3858754 A, US3618815 A, US3554400 A, US3315837 A, US3300081 A, US2547059 A, US2426550 A, US2124823 A, JP2058550 A2,
Forward Citations:	WO14152235, WO12109260, WO09005050, WO0069734, USD747649, USD747199, USD696593, USD672235, USD658980, USD640141, USD638704, USD637489, USD478062, USD432015, US9457930, US9321563, US9199763, US9033174, US9016034, US8998015, US8931656, US8857644, US8833585, US8733576, US8708188, US8627978, US8534490, US8454292, US8371467, US8336726, US8336725, US8240498, US8167162, US8113375, US8109406, US7918359, US7757887, US7380685, US7314148, US7168586, US7165696, US6889861, US6729495, US6443323, US6425493, US6405889, US6338418, US6247608, US6234336, US6138856, US6102242, US5947317, US2012043325, US2011233227, US2011186575, US2011100854, US2010326281, US2010294768, US2010287886, US2010276423, US2010126992, US2010116374, US2010012657, US2009223981, US2009179033, US2009173737, US2008302756, US2008110888, US2008099480, US2007262079, US2007108209, US2007068943, US2006043091, US2005224497, US2005218013, US2005184074, US2004206764, US2004195240, US2004040963, JP2009012823, EP1353852, EP1196328, CN105873829, CN104837733,

Abstract:
Source: US5813561A This invention comprises a sanitary beverage can lid wherein the center platform of the lid including the pull tab is raised from below the rim of the can as in conventional cans to a position close to or slightly above the rim of the can. The center platform diameter is reduced in diameter to provide additional space from the exterior of the can body to the edge of the platform. The pull tab is positioned in the middle of the center platform so that the end of the pull tab is at the edge of the center platform to facilitate opening of the can. The raised center platform and the lid design prevent an individual's lip from coming in contact with the groove along the edge of the lid where dirt may accumulate. Another feature is the provision of a raised rim on the platform with an interior drain−back slope so that any excess beverage flows back into the can.

0) US3250425A – ROTATABLE PULL TAB TO BREAK SCORED TEAR STRIP

63) Family number: 29594303 (US3250425A) © PatBase

Title: ROTATABLE PULL TAB TO BREAK SCORED TEAR STRIP

Priority: US19640345434 19640217

Family:

Publication number	Publication date	Application number	Application date
AT247785 B	19660627	AT19640011074	19641230
AU5457865 A1	19660804	AU19650054578	19650202
BE659885 A	19650817		19650217
US3250425 A	19660510	US19640345434	19640217

Probable Assignee: CONTINENTAL CAN CO

Assignee(s):(std)**:** CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC

Inventor(s):(std)**:** NICHOLSON JOHN B ; STEC FREDERICK J

Inventor(s): FREDERICK J STEC AND JOHN B NICHOLSON

International class (IPC 8–9): B65D17/28 B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention); B65D (Subclass/Invention)

International class (IPC 1–7): B65D17/34

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/273 D9/438

Classification Explorer

Cited documents: US2029328 A,

Forward Citations: WO9400353, USD490311, US9181007, US9033174, US8931656, US8833585, US8336726, US8336725, US8240498, US8215513, US7918359, US5456378, US5248053, US5224618, US5131555, US3446390, US3370744, US2011233227, US2010294768, US2009179033, US2009173737, US2008110887, US2007262079, US2007068943, EP0542517,

Abstract:
Source: US3250425A (Claim 1) 1. An easy open,ng container clem,_nt having a removable portion define_ by a wakening line, said removable portion including a starting portion, a pull tab, a fastener securing said pull tab to said starting portion for effecting the rupture of said container element alon– said weakening line and for limited pivotal movement o_f said pull tab, and said container eiement having a projectioii disposed radially outwardly of said weakening line in the path of pivotal novement of said pull tab and adapted to be en– gaged by said pull tab, sa–id projection including a terminal ramp generally opposing said pull tab whereby when said pull tab is pivoted against said projection said pull tab will r'de up said ramp arl–d onto said projeciion thereby placin'g a lifting force on said st,,irting portion through said fastener sufficient to effect an initial rupture of the container element.

0) US4116360A – CAN END WITH PROTECTIVE FOLD

64) Family number: 1104641 (US4116360A) © PatBase

Title: Can end with protective fold

Priority: US19720229678 19720228

Family:

Publication number	Publication date	Application number	Application date
AR198817 A1	19740724	AR19730246788	19730226
AU197352425 A1	19740822	AU19730052425	19730221
AU474872 B2	19760805	AU19730052425	19730221
BR7301487 A0	19740905	BR19730001487	19730228
CA1007583 A1	19770329	CA19720150121	19720824
DE2308986 A1	19730906	DE19732308986	19730223
FR2173882 A1	19731012	FR19720030732	19720830
FR2173882 B1	19780721	FR19720030732	19720830
GB1422648 A	19760128	GB19730009359	19730226
JP1019518 C3	19801030	JP19730023681	19730227
JP48098989 A2	19731215	JP19730023681	19730227
JP55010456 B4	19800317	JP19730023681	19730227
US4116360 A	19780926	US19720229678	19720228

Probable Assignee: DORN CO V

Assignee(s):(std)**:** DORN CO ; DORN CO V ; DORN CY VAN ; CENTRAL STATES CAN CO ; CENTRAL STATES CAN CO DIVISION

Assignee(s): CENTRAL STATES CAN CO DIVISION OF VAN DORN COMPAN ; CENTRAL STATES CAN CO DIVISION OF VAN DORN COMPANY ; MCKERNAN BERNARD J ; VAN DORN CY US ; VAN DORN CO ; VAN DORN COMPANY ; VAN DORN CY ; STARGELL DONALD E

Inventor(s):(std)**:** MCKERNAN B ; MCKERNAN BERNARD J ; MCKERNAN BERNARD JOSEPH ; STARGELL D ; STARGELL DONALD E ; STARGELL DONALD EARLE

Inventor(s): BERNARD JOSEPH MCKERNAN ; BERNARD JOSEPH MCKERNAN AND DONALD EARLE STARGELL ; DONALD EARLE STARGELL ; EARLE STARGELL DONALD ; JOSEPH MCKERNAN BERNARD

International class (IPC 8–9)**:** B65D1/02 B65D17/00 B65D17/34 B65D17/347 B65D17/353 B65D17/40 B65D41/32 B65D41/42 (Advanced/Invention);
B65D1/02 (Advanced/Non–invention);
B65D1/02 B65D17/00 B65D17/28 B65D41/32 (Core/Invention)

International class (IPC 1–7)**:** B65D17/00 B65D17/02 B65D17/16 B65D17/24 B65D17/40 B65D41/32 B65D41/42

CPC: B65D17/163

European class: B65D17/16B1

US class: 220/273

Classification Explorer

Cited documents: US3696961 A, US3682350 A, US3490643 A, US3451586 A, US3450301 A, JP47008696 A2, FR2112318 A1,

Forward Citations: WO9630269, WO13020706, US9637269, US9272819, US8844761, US5145086, US4804106, US4565298, US4386713, US2006237459, GB2168313, GB2116934, EP2557050, DE2728511, DE2655019,

Abstract:
Source: US4116360A An aluminum food product container or can having an easily opened can end seamed to one end of the can body. The outer surface of the can end member has a score line along which the can end is severed for opening the can and removing an end panel. The score line is located adjacent and above a shoulder in the can body extending inwardly below the seam. A protective double fold is formed in the can end by

extending the end metal annularly inwardly in a first layer from the score line, then reversely outwardly in a second layer beneath the first layer to a location circumferentially underlapping the score line location, and then reversely inwardly in a third layer beneath the first two layers into the can end panel portion. The double fold formation presents a dull hazard–free edge to the end panel when torn from the can end member.

0) US3915333A – EASY OPENING END UNIT

65) Family number: 1189362 (US3915333A) © PatBase

Title: Easy opening end unit

Priority: US19740442453 19740214

Family:

Publication number	Publication date	Application number	Application date
CA1018915 A1	19771011	CA19740203881	19740703
GB1504204 A	19780315	GB19750006290	19750214
HK18880 A	19800418	HK19800000188	19800410
US3915333 A	19751028	US19740442453	19740214

Probable Assignee: CONTINENTAL CAN CO

Assignee(s):(std)**:** CONTINENTAL GROUP ; CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC ; CONTINENTAL GROUP INC ; MASCIA CARMEN T ; PEYSER HARRY A

Inventor(s):(std)**:** MASCIA CARMEN T ; PEYSER HARRY A

International class (IPC 8–9): B65D17/34 B65D39/00 (Advanced/Invention); B65D17/28 B65D39/00 (Core/Invention)

International class (IPC 1–7): B65D17/16 B65D17/24 B65D39/00

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/268

Classification Explorer

Cited documents: US3813000 A, US3731836 A, US2261117 A,

Forward Citations: US5921425, US4122970, US4106662, US4023703, FR2385603, FR2312413, FR2312413, DE2832807,

Abstract:
Source: US3915333A This disclosure is directed to an easy opening end unit which includes an end panel, an opening in the end panel, the opening being defined by a free end of the end panel, the free edge merging with a line of weakness and collectively bounding a tab joined by the line of weakness to the end panel, an upstanding boss carried by the tab adjacent the line of weakness functioning as means for concentrating an opening force to rupture the line of weakness thereby free the tab for rotational movement relative to the end panel and providing access to a product in a container with which the end unit is associated.

0) US5876171A – ONE–OUT CONVERSION PRESS

66) Family number: 11466565 (US5876171A) © PatBase

Title: One–out conversion press

Priority: US19970853421 19970509

Family:

Publication number	Publication date	Application number	Application date
US5876171 A	19990302	US19970853421	19970509

Probable Assignee: DAYTON RELIABLE TOOL AND MFG CO

Assignee(s):(std)**:** DAYTON RELIABLE TOOL AND MFG CO

Assignee(s): DRT MFG CO ; FIFTH THIRD BANK ADMINISTRATIVE AGENT AS ; DAYTON RELIABLE TOOL AND MFG

Inventor(s):(std)**:** DIETRICH KURT D ; MARTIN GREGORY S ; SHORT STEPHEN G

International class (IPC 8–9): B21D51/38 (Advanced/Invention); B21D51/38 (Core/Invention)

International class (IPC 1–7): B21D51/44

CPC: B21D51/38

European class: B21D51/38

US class: 413/12 413/14 413/66

Classification Explorer

Cited documents: US5284045 A, US5259496 A, US4932822 A, US4723882 A, US4568230 A, US3712483 A, US3642120 A, US3231065 A, US3196817 A,

Forward Citations: WO14144119, US9321097, US9051126, US6887030, US6802683, US6533518, US6524048, US2012085624, US2003053890, CN105050747,

Abstract:
Source: US5876171A A conversion press (20) which is readily reconfigurable to process shells of different sizes includes an endless belt (68) having a single lane of apertures (86) formed therein for transporting shells (S) along a progression of end–forming tooling (60, 62) comprising seven stations (58a–g) along an end path (59) through the press. A tab–forming tooling path (100) extends from a tab stock feeder (104) to a tab–staking station (58f) adjacent the discharge end of the press, the tab–forming path oriented at an oblique angle to the end path. The tab–forming tools (94, 96) are mounted on tab bases (112, 110) which are slidably adjustable on stationary and reciprocating press members (34, 44) along the tab path toward and away from the tab–staking station. Shells are supplied to the belt by a servo–driven downstacker (120) having feed screws (126) which engage the edge (E) of a shell within a downstacker feed chute (122) and which are adjustably mounted on a downstacker platen (135) to permit their relocation to accommodate changing shell size. Reconfiguring the press to process shells of a different size from about 1 inch to about 4 inches in diameter is accomplished by changing the belt and the end tooling, adjusting the tab tooling bases to accommodate for change in end rivet location, and changing the feed chute and adjusting the downstacker feed screw positions to correspond to the new shell diameter.

67) Family number: 31450352 (US2007177962A) © PatBase

Title: METHOD AND DEVICE FOR THE PRODUCTION OF A CAN BODY, AND CAN BODY

Priority: CH20030001140 20030627 CH20040000054 20040115 CH20050000016 20050114 WO2005CH00341 20050617 US20050629472 20050617 EP20040736969 20040617 WO2005CH00016 20050114 WO2004CH00368 20040617 EP20050700311 20050114 WO2006CH00031 20060114

Family:

Publication number	Publication date	Application number	Application date
AT474689 E	20100815	AT20050750490T	20050617
AT487551 E	20101115	AT20040736969T	20040617
AT504369 E	20110415	AT20060700203T	20060114
BRPI0506878 A	20070612	BR2005PI06878	20050114
BRPI0512117 A	20080206	BR2005PI12117	20050617
BRPI0606325 A2	20090616	BR2006PI06325	20060114
DE502004011875 D1	20101223	DE200450011875T	20040617
DE502005009965 D1	20100902	DE200550009965T	20050617
DE502006009246 D1	20110519	DE200650009246T	20060114
EA008857 B1	20070831	EA20060001323	20050114
EA009223 B1	20071228	EA20070000053	20050617
EA010537 B1	20081030	EA20070001509	20060114
EA200601323 A1	20070227	EA20060001323	20050114
EA200700053 A1	20070427	EA20070000053	20050617
EA200701509 A1	20071228	EA20070001509	20060114
EP1644145 A1	20060412	EP20040736969	20040617
EP1644145 B1	20101110	EP20040736969	20040617
EP1713612 A2	20061025	EP20050700311	20050114
EP1713612 B1	20130320	EP20050700311	20050114
EP1755818 A1	20070228	EP20050750490	20050617
EP1755818 B1	20100721	EP20050750490	20050617
EP1838473 A1	20071003	EP20060700203	20060114
EP1838473 B1	20110406	EP20060700203	20060114
ES2349299 T3	20101229	ES20050750490T	20050617
ES2356328 T3	20110407	ES20040736969T	20040617
ES2364422 T3	20110902	ES20060700203T	20060114
ES2415108 T3	20130724	ES20050700311T	20050114
JP2007521963 T2	20070809	JP20060548065T	20050114
JP2008502541 T2	20080131	JP20070515761T	20050617
JP2008526519 T2	20080724	JP20070550653T	20060114
JP5150252 B2	20130220	JP20070515761T	20050617
JP5295569 B2	20130918	JP20070550653T	20060114
JP5313451 B2	20131009	JP20060548065T	20050114
PT1644145 T	20110204	PT20040736969T	20040617
PT1713612 T	20130531	PT20050700311T	20050114
PT1755818 T	20101021	PT20050750490T	20050617
SI1644145 T1	20110331	SI20040031590T	20040617
SI1713612 T1	20130830	SI20050031736T	20050114
US2007177962 AA	20070802	US20040562035	20040617
US2008050205 AA	20080228	US20050585996	20050114

US2008164241 AA	20080710	US20050629472	20050617	
US2009003972 A9	20090101	US20040562035	20040617	
US2009008429 AA	20090108	US20060795260	20060114	
US7584639 BB	20090908	US20040562035	20040617	
US7670094 BB	20100302	US20050585996	20050114	
US7971771 BB	20110705	US20060795260	20060114	
US9365344 BB	20160614	US20050629472	20050617	
WO05000498 A1	20050106	WO2004CH00368	20040617	
WO05068127 A2	20050728	WO2005CH00016	20050114	
WO05068127 A3	20051215	WO2005CH00016	20050114	
WO05123323 A1	20051229	WO2005CH00341	20050617	
WO06074570 A1	20060720	WO2006CH00031	20060114	

Probable Assignee: CREBOCAN AG

Assignee(s):(std)**:** BOLTSHAUSER WERNER ; CAPROSOL AG ; CREBOCAN AG

Inventor(s):(std)**:** BOLTHAUSER WERNER ; BOLTSHAUER WERNER ; BOLTSHAUSER WERNER

Inventor(s): WERNER BOLTSHAUER ; WERNER BOLTSHAUSER

Agent(s): BUECHEL VON REVY AND PARTNER; ROEB MARIA; HARNESS DICKEY AND PIERCE PLC; HARNESS DICKEY AND PIERCE

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B21C37/08 B21C37/09 B21D39/03 B21D51/26 B21D51/30 B21D51/46 B23D21/04 B23K1/20 B23K26/00 B23K26/20 B23K26/28 B23K31/02 B23K33/00 B26D3/16 B65B7/28 B65D8/04 B65D8/16 B65D8/18 B65D8/22 B65D83/14 B65D83/38 (Advanced/Invention); B23K101/12 B65D83/42 (Advanced/Non–invention); B21C37/08 B21D39/03 B21D51/00 B21D51/26 B21D51/30 B21D51/38 B23D21/00 B23K1/20 B23K26/00 B23K31/02 B23K33/00 B26D3/16 B65D8/04 B65D83/14 (Core/Invention)

International class (IPC 1–7): B21C37/08 B21D51/26 B23K26/28 B23K33/00 B65D83/14

CPC: B23K26/206 B65D7/04 B65D7/38 B65D7/46 Y10T29/49828 Y10T29/49904 Y10T29/49986 Y10T29/53322 B21C37/09 B21D51/2646 B21D51/2669 B23K26/32 B23K2203/50 B23K33/006 B21D51/2676 B23K26/28 B23K2201/12 B21D51/2653 B65B7/28 B23D21/04 B65D83/38 B21D51/26 B23K26/282 B23K2201/125 B23K2203/04 B23K2203/10 B65D83/42 Y10T428/12493 B23K2201/34 B23K2203/08

European class: B21C37/09 B21D51/26 B21D51/26C B21D51/26E B21D51/26L B23D21/04 B23K26/20D B23K26/28 B23K26/28B B23K26/32D B23K26/32L2 B23K33/00B2 B65D7/04 B65D7/38 B65D7/46 B65D83/38 L23K201/12 L23K201/12B L23K201/34 L23K203/04 L23K203/10 L65D83/42

US class: 1/1 219/121.64 219/121.640P 220/23.91 220/23.910S 220/612 220/669 220/669S 220/678 228/13 228/13S 228/160 228/160P 29/429 29/429S 29/469 29/469S 29/527.4 29/527.400S 29/773 413/1 413/12 413/12S 413/19 413/19S 413/1P 413/2 413/26 413/2P 413/2S 413/3 413/4 413/69 413/69S 413/74 413/8 413/8P 428/615 428/615S 72/379.4 72/58

Classification Explorer

Cited documents: WO9534474 A1, WO05068127 A2, WO05000498 A1, WO0242196 A2, WO02092466 A1, WO0202257 A1, WO0035772 A1, US7670094 BB, US7584639 BB, US7584639 B1, US6581401 BA, US6389866 BA, US5997232 A, US5511826 A, US5313862 A, US5186592 A, US5170684 A, US5111721 A, US5086677 A, US5060367 A, US4905858 A, US4889023 A, US4694137 A, US4615470 A, US4591405 A, US4467171 A, US4341943 A, US4315132 A, US4199851 A, US4095544 A, US3548564 A, US3526186 A, US3337944 A, US244465 A, US2444465 A, US2008164241 AA, US2007177962 AA, US2005167091 AA, US2005166979 AA, US2004188394 AA, JP9290318 A2, JP9253763 A2, JP9133293 A2, JP9011329 A2, JP7223111 A2, JP7032176 A2, JP63032129 U1, JP63032129 U, JP62171424 U1, JP62171424 U, JP60165282 A2, JP47036529 Y1, JP42000443 B4, JP42000443 B1, JP38015843 B1, JP3022557 U1, JP2004345694 A2,

JP2004195483 A2, JP2003293105 A2, JP2003214539 A2, JP2003146333 A2, JP2003081265 A2, JP2002532347 T2, JP2001354295 A2, JP1100614 U1, JP10305338 A2, JP10129660 A2, JP10113716 A2, JP10094848 A2, JP10082500 A2, GB878713 A, FR2543923 A1, FR1599934 A, EP1153837 A1, EP0853515 B1, EP0853515 A1, EP0853514 B1, EP0853514 A1, EP0853513 B1, EP0853513 A1, EP0666124 B1, EP0666124 A1, EP0547754 A2, EP0525729 A1, EP0397558 A1, EP0208564 A1, EP0200098 A2, DE2456097 A1, DE19834400 C1, DE19716079 A1, DE1452556 A1,

Forward Citations: WO14074895, WO12135968, WO12019313, WO11116485, WO11116485, WO11094879, WO10063132, WO09155721, WO09015498, WO08002741, WO06074570, WO05123323, WO05068127, USD787952, USD698668, US9382034, US9365344, US9327338, US9227480, US9126257, US9038864, US8978922, US8764070, US8555692, US8322183, US8257577, US8240185, US7971771, US7954354, US7934410, US7726165, US7670094, US7584639, US2016354831, US2013306659, US2013251551, US2013219720, US2013216298, US2012247166, US2012024911, US2011203677, US2011167889, US2011114650, US2010263431, US2010206891, US2010199741, US2009008429, US2008277282, US2008164241, US2008022746, US2007295051, KR101301488, JP2011525458, GC3212, EP2366472, EP2359954, EA9223, EA8857, EA10537, EA019326, EA018405, EA010537, EA009223, EA008857, DE102010038151, DE102008003211, DE102008003211, CN105478524, CN104271958, CN103691832,

Abstract:
Source: US2007177962A A can body with a jacket−like closed wall and a base constructed on one end of the can wall includes an external base covering in the form of a sheet material. The base covering is fixed into position on an annular connection region of the can body. The base covering can form a basically flat imprintable region in a main region that is surrounded by the connection region. If a bar code can be applied in this imprintable region, then a restriction of the configuration possibility of the can wall disappears. The base covering can form a stand region whereby a standing can body is only in contact with the support surface if necessary via the base covering, and consequently the occurrence of corrosion problems is prevented. A retaining device that leaves the base of a held can body free and a position fixing apparatus are used for fixing the base covering into position. A decorative foil on the exterior of the can wall can be overlapped by the base covering, which serves to prevent a detachment of the decorative foil on the base.

0) US5494184A – CAN TOP WITH AN OVERTURNABLE TAB

68) Family number: 11841060 (US5494184A) © PatBase

Title: CAN TOP WITH AN OVERTURNABLE TAB

Priority: JP19930187149 19930630

Family:

Publication number	Publication date	Application number	Application date
GB2280165 A1	19950125	GB19940013061	19940629
GB2280165 A8	00000000	GB19940013061	19940629
GB2280165 B2	19970205	GB19940013061	19940629
GB9413061 A0	19940817	GB19940013061	19940629
JP3468548 B2	20031117	JP19930187149	19930630
JP7017540 A2	19950120	JP19930187149	19930630
US5494184 A	19960227	US19940267522	19940629

Probable Assignee: KIRIN BEER KK

Assignee(s):(std): KIRIN BREWERY ; KIRIN HOLDINGS CO LTD ; MITSHUBISHI MATERIALS CORP ; MITSUBISHI MATERIALS CORP

Assignee(s): KIRIN BEER KK ; MITSUBISHI MATERIALS 5 1 OTEMACHI 1 CHOME CHIYODA ; KIRIN BREWERY CO LTD

Inventor(s):(std): ARII JIRO ; KITAGAWA HIROAKI ; MURAI HIROYUKI ; NISHIYAMA SADAO ; NOGUCHI AKIRA ; YONEZAWA ICHIRO

Inventor(s): AKIRA NOGUCHI ; SADAO NISHIYAMA ; HIROAKI KITAGAWA ; HIROYUKI MURAI ; ICHIRO YONEZAWA ; JIRO ARII

International class (IPC 8–9): B65D17/32 B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/32 B65D17/34

CPC: Y10S220/906 B65D2517/0092 B65D17/165

European class: B65D17/16B2

US class: 220/269 220/271 220/906

Classification Explorer

Cited documents: US5285919 A, US5011037 A, US4446985 A, US4402421 A, JP2120328 U, JP176423 U, GB2265597 A1, GB1532081 A,

Forward Citations: WO14165209, WO14149768, WO13124019, WO13102595, WO13102594, WO11031681, USD787952, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD559680, USD421393, US9446879, US9403628, US9371152, US9315290, US9233784, US9181007, US9181006, US9139343, US9051081, US8939306, US8931660, US8875926, US8727169, US8689998, US8640905, US8573432, US8505765, US8397935, US8328041, US8313004, US8235244, US8205477, US8186532, US7938290, US7926675, US7909196, US7743635, US7673768, US7506779, US7500376, US7384227, US7380684, US7165926, US7100789, US6951293, US6935826, US6889862, US6877941, US6848875, US6408498, US6202880, US6065634, US6015060, US5819973, US5695085, US5647499, US2016031613, US2015034648, US2015001220, US2013240535, US2011204055, US2011108552, US2011031256, US2010243663, US2010018976, US2009180999, US2009120943, US2009050637, US2009020543, US2007284332, US2007062950, US2006277966, US2006016815, US2006010956, US2005252917, US2005247717, US2004140309, US2004056032, US2003202862, US2003173367, RU2573284, JP1246230, EP2791032, EP2612823, EP2612822, EP2612821, EP2601109, EP2601109, CN105102332, CN104619597, CN104144858, AU2012364345,

Abstract:
Source: US5494184A A can top end includes a disc–shaped panel having a disc–shaped flat section an outer periphery to be engaged with an upper end of a can body, and a stay–on type tab attached on the flat section of the panel. The disk–shaped flat section has a primary score to define a primary scored portion surrounded by the primary score and the flat section further includes a secondary score to define a secondary scored portion

surrounded by the secondary score. The tab has a connecting portion rotatably connected to a center portion of the flat section around an axis perpendicular to the flat section and the tab has both a pull−up end and a push−down end. The primary scored portion is located below the push−down end of the tab to enable the primary scored portion to be opened by pulling up the pull−up end of the tab. The secondary scored portion is located at a position facing the push−down end of the tab when the tab is rotated to a predetermined angle from an initial position, so that the secondary scored portion is opened by pulling up the pull−up end of the tab.

0) US2012319445A – SINGLE INPUT AND MULTI–OUTPUT DRIVE SYSTEM UTIL...

69) Family number: 52583018 (US2012319445A) © PatBase

Title: SINGLE INPUT AND MULTI–OUTPUT DRIVE SYSTEM UTILIZING AN ACTIVE MATERIAL ACTUATED TRANSMISSION

Priority: US20110497572P 20110616 US20110497575P 20110616 US20120525435 20120618 US20120618340 20120914 US20110534659P 20110914 US20110548956P 20111019 US20130917780 20130614 US20140319606 20140630

Family:

Publication number	Publication date	Application number	Application date
CN104228821 A	20141224	CN201310757240	20131210
CN105221370 A	20160106	CN201510368854	20150629
DE102013113684 A1	20141218	DE201310113684	20131209
DE102015110131 A1	20151231	DE201510110131	20150624
US2012319445 AA	20121220	US20120525435	20120618
US2013061523 AA	20130314	US20120618340	20120914
US2014081513 AA	20140320	US20130917780	20130614
US2014333088 AA	20141113	US20140319606	20140630
US9035579 BB	20150519	US20120618340	20120914
US9068903 BB	20150630	US20130917780	20130614

Probable Assignee: GM GLOBAL TECH OPERATIONS INC

Assignee(s):(std)**:** BLAIR DANIEL ; BROWN JAMES HOLBROOK ; DYNALLOY INC ; DYNALLOY INC GM GLOBAL TECHNOLOGY OPERATIONS LLC ; GM GLOBAL TECH OPERATIONS INC ; LOMBARDI JAMES M ; PELINO CRESCENZIO ; ZOLNO ARAGORN ; MANKAME NILESH D

Assignee(s): WILMINGTON TRUST CO ; GM GLOBAL TECHNOLOGY OPERATIONS LLC ND GES D STAATES DELAWARE ; GM GLOBAL TECHNOLOGY OPERATIONS LLC N D GES D STAATES DELAWARE ; GM GLOBAL TECHNOLOGY OPERATIONS LLC

Inventor(s):(std)**:** BLAIR DANIEL ; BROWN JAMES HOLBROOK ; LANG STEVEN C ; LOMBARDI JAMES M ; MANKAME NILESH D ; PELINO CRESCENZIO ; ZOLNO ARAGORN

Agent(s): MICKKI D; PARKS WOOD LLC

International class (IPC 8–9): A47C3/20 B60J5/00 B60J5/04 B60J7/02 B60J7/057 B60W10/30 B60W40/00 E05F15/20 F03G7/06 F16H19/02 F16H37/06 G01M17/00 G05D3/12 G06F19/00 H02P1/00 (Advanced/Invention); E05F15/41 (Advanced/Non–invention)

CPC: F16H37/065 B60N2/0296 B60N2/0232 G01M17/00 B60J5/04 Y10T74/19047 Y10T74/19074 B60J7/022 E05F15/41 E05Y2201/214 E05Y2201/246 E05Y2201/404 E05Y2201/43 E05Y2201/434 E05Y2201/696 E05Y2400/554 E05Y2400/58 E05Y2800/67 E05Y2900/542 B60J7/0573 Y10T74/18792 B60N2/02 B60N2/0248 B60N2/22 B60N2002/0236 B60N2002/024 B60N2/06

US class: 1/1 296/146.1 297/338 318/280 318/282 49/26 701/34.4 74/665F 74/724 74/89.14

Classification Explorer

Cited documents: US7764036 BB, US7725231 BB, US7637057 BB, US6902048 BA, US6534939 BB, US6428092 BA, US6315355 BA, US5758758 A, US5678671 A, US5673965 A, US5558388 A, US5069502 A, US5026113 A, US4914367 A, US4832477 A, US4629953 A, US4220900 A, US4039222 A, US2010257953 AA, US2010257952 AA, US2009086346 AA, US2008120911 AA, US2007272457 AA, US2007049453 AA, US2005253433 AA, US2005141115 AA, US2002024308 AA, CN102371875 A,

Forward Citations: WO16066537, US9550437, US9377083, US9278610, US8991103, US2016288631, US2015360586, US2014173984, CN104354574,

Abstract:
Source: US2012319445A A single input, multi–output drive system adapted for use, for example, with a power seat, includes an input power source, such as a PMDC motor, and at least one transmission further including a plurality of output elements shiftable between engaged and disengaged conditions relative to the source, so as to be selectively driven thereby, and drivenly coupled, for example, to various functions of the power seat, and a

plurality of active material actuators drivenly and individually coupled to an associated one of the output elements, and configured to selectively engage the associated output element and input source.

0) US3068345A – ELECTRICAL SEPARATION OF WELDED CAN BODIES

70) Family number: 21931848 (US3068345A) © PatBase

Title: ELECTRICAL SEPARATION OF WELDED CAN BODIES

Priority: US19600041053 19600706 US19600041054 19600706

Family:

Publication number	Publication date	Application number	Application date
GB916059 A	19630116	GB19610013835	19610417
US3068344 A	19621211	US19600041053	19600706
US3068345 A	19621211	US19600041054	19600706

Probable Assignee: CONTINENTAL CAN CO

Assignee(s):(std)**:** CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC

Inventor(s):(std)**:** SZATKOWSKI RICHARD R ; HENRY KEINANEN ; ERLANDSON PAUL M

Inventor(s): KEINANEN HENRY

International class (IPC 8–9)**:** B21D51/26 B23K11/22 B26D7/10 B26F3/00 B26F3/06 (Advanced/Invention); B21D51/26 B23K11/00 B26D7/08 B26F3/00 B26F3/06 (Core/Invention)

International class (IPC 1–7)**:** B21D51/26 H05B3/00

CPC: B26F3/06 B23K11/22 B26D7/10 B26F3/002 B21D51/2676

European class: B21D51/26L B23K11/22 B26D7/10 B26F3/00B B26F3/06

US class: 219/64 219/68

Classification Explorer

Cited documents: US2621277 A, US2444465 A, US2444463 A, US2187740 A, US2060561 A,

Forward Citations: US9387959, US8899091, US8636161, US7673691, US3578936, US3182171, US2011036134, US2011011866, US2010003109, US2007102162,

Abstract:
Source: GB916059A 916,059. Making cans; breaking; shearing; forging. CONTINENTAL CAN CO. Inc. April 17, 1961 [July 6, 1960 (2)], No. 13835/61. Classes 83 (2) and 83 (4). A method of separating tubular sheet metal members such as can bodies, connected together by tabs comprises moving the members in an axial direction and effecting separation by heating or by heating and stressing of the tabs. An apparatus for carrying out the method comprises a frame F supported by legs 22 on which is mounted a pair of aligned tube guides 15, a breaker apparatus 17 and a tab separating assembly 18. The guide 15 comprises a frame 23 supporting a pair of vertical and horizontal waisted guide rollers 24, 23. The breaker assembly 17 consists in a shaft 28 retained by bearing units 35 35 on an adjustable bracket 33 to which is secured a drive sprocket 36 and a breaker roller 26, an idler sprocket 37 mounted on a stub shaft 38 is also carried by the bracket 33. A pair of side plates 40, 41 with retaining plates 43, extend longitudinally on frame members 19, 20 to receive a sliding plate 42 on which is mounted bearings 44, 45 to retain a shaft 46 to which is fixed an adjusting crank arm 61 and which extends beyond bearing 44 to carry a drive sprocket 52 and a drive pulley 53. A pair of pivoting arms 47, 48 keyed to the shaft 46 carry bearing units 50 which house the shaft 29 on which the lower breaker roller 27 and the driven sprocket 54 are fitted. A cleated belt 55 connects the pulleys 53, 54. The longitudinal position of the lower breaker roller assembly is adjusted by moving the plate 42 controlled by the nut and screw arrangement 60, 56, whilst the height is set by releasing the locking screw 70 of the crank arm 61 fitted to the shaft 46 and the nut and screw assembly 68, 67 connected at one end to a fixed plate 63 and at the other to the crank 61. The breaker apparatus is driven by a drive unit D through a gear–box 72 via a belt driven, variable speed gear–box 73 which has fitted to its output shaft 75 a pulley 77 and a sprocket 76 which drives a chain 78 over sprockets 76, 52, 36, 37 and an adjustable idler sprocket 80. The tab–severing device comprises a supporting frame structure 85 mounted on a frame assembly F, the supporting plate 93 of which supports the feed and guide assembly 94 comprising a series of shaft assemblies 105, 117, 127 and 132 mounted along the arcuate–shaped bar 95 fixed to a plate 93. The shaft assembly 105 comprises a shaft 105 supported by bearings 101, 102 carrying a pinned drive gear 107 and two pinned pulleys 112, 115. A pair of pulleys 123, 124 rotate about the shaft 117 and a pulley 130 rotates about shaft 132 whilst a multiple groove pulley 128 rotates about a shaft 127 corresponding to shaft 105. Circular sectioned driving belts 126, 131 couple the pulleys 112, 123, 115, 124 and 128, 130 respectively and engage the lower part of the can body B. The pulley shafts are driven by gears 107, 129 and intermediate gears 135 via a drive belt 138 which is entrained over a motor–driven pulley 77, an idler pulley 141 and a driven pulley 137 which is attached to an extension of one of the shafts 105. Due to the decreasing diameters of the gears 107, 129 and

that the breaker driving sprocket 76 is on a common driving shaft 75 with the pulley 77, the belts 126, 131 of each set are progressively driven faster and the bodies fed in timed relation to the feeding of the tube through the breaking device. The guide assembly comprises a plurality of adjustable brackets 146 and supporting bars 164 spaced along the plate 93, which support the inner 142 and outer 143 sets of guide rolls, each set comprising of a parallel and conical shaped roller fitted to a shaft, the pitch of the rollers is adjusted to suit the can diameter. A transition guide assembly comprises a pair of horizontally mounted waisted rollers 194 and two pairs of vertical rollers 209, 220 suspended by brackets and shafts from the plate 93 and is positioned between the breaker roller assembly 17 and the start of the feed and guide assembly 94 to facilitate the transfer of the partially flattened can body from the breaker rollers on to the feed and guide assembly. A hollow conductor 222 supported by insulating clamp blocks 223 carried on a bracket 224 is adjustably fixed to the plate 93 and provided with coolant inlet and outlet fittings 227, 228. The electrical connections are made at 232, 233 and a series of brush units 237 comprising a plurality of thin resilient metallic strips are fitted to the contacting electrodes 235 which are fixed to the mounting blocks 236 brazed to the conductor 222. Operation.–A tube T having score lines S is passed through the guides 15, 16 and diverted upwardly from its line of travel between breaker rollers 26, 27 which partially squeeze the tube causing it to fracture along the score line S remote from the welded seam W. A continuous line of can bodies B so separated and interconnected by tabs t along the welded seam W pass through the transition guide assembly 180 to the feed and guide assembly 94 and into contact with the brush units 237. The tabs t are progressively heated due to the shunted circuits formed across them and with or without the increased tension across the tabs due to the increasing speed of the belts 126, 131 separation of the car bodies occurs followed by their ejection from the machine. In a first modification the gears of the drive and feed assembly may be replaced by a series of belt–driven pulleys. In a second modification.an A.C. or D.C. circuit comprising a pair of electrodes 309, 310, a transformer T.F. and a control device 316 may be used to heat and sever the tab whilst it is bridging the gap between the electrodes with or without any tensile or shear stresses being imparted due to the relative speeds of the drive rolls 307, 308. In a further modification, a reciprocating shearing device comprising a knife 321 fitted to a shaft 320 of an electromagnetic operator 319 may be fitted into the above circuit and controlled by the control device 316 so that the knife is operated simultaneously with the heating and tensioning cycle.

0) US2004167625A – SPACER FILLER

71) Family number: 30828919 (US2004167625A) © PatBase

Title: SPACER FILLER

Priority:

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Probable Assignee: DEPUY SYNTHES PRODUCTS INC

Assignee(s):(std)**:** ABRAHAM J DOMB ; ADHYA SANKAR ; BEN YOSEF YOSEF ; BEYAR MORDECHAY ; DASSLER ADI KG ; DASSLER KG ADI ; DEPUTY SPINE INC ; DISC O TECH LTD ; DISC O TECH MEDICAL ; DISC O TECH MEDICAL TECHOLOGIE ; DEPUY SPINE INC ; DISC O TECH MEDICAL TECHNOLOGI ; DISC O TECH MEDICAL TECH LTD ; DEPUY SYNTHES PRODUCTS LLC ; DISCOTECH MEDICAL TECHNOLOGIES ; LAMAROVITZ ILAN ; DISCOTECH N V ; MAGAL ELAD ; DISC O TECH ORTHOPEDIC TECHNOL ; DEPUY SYNTHES PRODUCTS INC ; DISC ORTHOPAEDIC TECHNOLOGIES ; MORDECHAY BEYAR ; ELAD MAGAL ; MCKINSTRY MICHAEL ; HWANG JEESEONG ; GIULIAN GARY ; MERRIL CARL ; EDGAR ROTEM ; GLOBERMAN OREN ; KYPHON SARL ; DISCO O TECH MEDICAL TECHNOLOG ; DOMB ABRAHAM ; HILA WACHSLER AVRAHAMI ; SHENHAV BOAZ ; SHARON SIMON ; VACHTENBERG OZ ; SHASHA URI ; SHAVIT RONEN ; WACHSLER AVRAHAMI HILA ; OREN GLOBERMAN ; US GOV COMMERCE ; US GOV HEALTH AND HUMAN SERV ; RONEN SHAVIT ; WARSAW ORTHOPEDIC INC

Assignee(s): ROQUE HUMBERTO FERREYRO IRIGOYEN ; ORTHOPHOENIX LLC ; REPRESENTED BY SECRETARY OF COMMERCE AS US GOV ; REPRESENTED BY SEC DEP OF HEALTH AND HUMAN SERVICES AS US GOV ; N A ; REPRESENTED BY SECRETARY OF COMMERCE NATIONAL INST ; SEC DEP OF HEALTH AND HUMAN SERVICES AS US GOV ; THE GOVERNMENT OF THE UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY OF COMMERCE ; THE GOVERNMENT OF THE UNITED STATES OF AMERICA AS REPRESENTED BY THE SECRETARY DEPARTMENT OF HEALTH AND HUMAN SERVICES ; REPRESENTED BY SEC DEP OF HEALTH AND HUMAN SERVICE ; REPRESENTED BY SECRETARY OF COMMERCE US GOV AS ; THE GOVERNMENT OF THE UNITED STATES OF AMERICA AS ; GLOBERMANN OREN ; HAND INNOVATIONS LLC ; HAND INNOVATIONS LLC325 PARAMOUNT DRIVERAYNHAMMA02767 0350US ; DOMB ABRAHAM JACKOB ; MARIO MARQUEZ MIRANDA ; DISCOTECH LANDHUIS JOONCHI KAYA INTERTRUST NVRJ BE ; DISCOTECH MEDICAL TECHNOLOGIES LTD ; DISCOTECH NV ; DISC O TECH MEDICAL TECHOLOGIE LTD ; MEDTRONIC SPINE LLC ; DISC OTECH MEDICAL TECHNOLOGIES LTD ; DISC O TECH ORTHOPEDIC TECHNOLOGIES INC ; DISCO O TECH MEDICAL TECHNOLOGIES LTD ; DEPUY SPINE INC RAYNHAM ; DISC ORTHOPAEDIC TECHNOLOGIES INC ; DISC O TECH MEDICAL TECHNOLOGIES LTD11 HAHOSHLIM STREETP.O. BOX 1226546724HERZLIA PITUACHIL ; DEPUY SPINE INC325 PARAMOUNT DRIVERAYNHAMMA02767US ; DEPUY SPINE LLC325 PARAMOUNT DRIVERAYNHAMMA02767US ; DEPUY SYNTHES PRODUCTS LLC325 PARAMOUNT DRIVERAYNHAMMA02767US ; DEPUY SPINE LLC ; DISC O TECH MEDICAL TECHNOLOGIES LTD ; DEPARTMENT OF HEALTH AND HUMAN SERVICES US GOV REP

Inventor(s):(std)**:** ADHYA SANKAR ; BEN YOSEF YOSEF ; BEYAR MODECHAY ; BEYAR MORDECHAY ; EDGAR ROTEM ; ELAD MAGAL ; FERREYRO ROQUE HUMBERTO IRIGOYEN ; GIULIAN GARY ; GLOBERMAN OREN ; DOMB ABRAHAM ; HILA BEYAR MORDECHAY GLOBERMAN ; HWANG JEESEONG ; MCKINSTRY MICHAEL ; MERRIL CARL ; MORDECHAY BEYAR ; OREN GLOBERMAN ; OZ VACHTENBERG ; RONEN SHAVIT ; SHASHA URI ; SHAVIT RONEN ; SHENHAV BOAZ ; URI BEYAR MORDECHAY SHAVIT RON ; URI SHASHA ; VACHTENBERG OZ ; WACHSLER AVRAHAMI HILA ; MAGAL ELAD ; GLOBERMANN OREN ; SHARON SIMON ; LAMAROVITZ ILAN ; MIRANDA MARIO MARQUEZ ; FERREYRO ROQUE HUMBERTO

Inventor(s): BEYAR MORDECHAY 30889 ; ILAN LAMAROVITZ ; WACHSLER AVRAHAMI HILA 69400 ; WACHSLER AVRAHAMI HILAIL ; YOSEF BEN YOSEF ; SIMON SHARON ; SHAVIT RONEN 69413 ; SHAVIT RONENIL ; HILA WACHSLER AVRAHAMI ; DOMB ABRAHAM JACKOB ; DOMB ABRAHAMIL ; GLOBERMAN OREN 46910 ; GLOBERMAN ORENIL ; BEYAR MORDECHAY 38900 ; BEYAR MORDECHAY GLOBERMAN OREN DOMB ABRAHAM ; BEYAR MORDECHAY GLOBERMAN OREN DOMB ABRAHAM SHAVIT RONEN WACHSLER AVRAHAMI HILA ; BEYAR MORDECHAY SHAVIT RONEN VACHTENBERG OZ ; BEYAR MORDECHAY SHAVIT RONEN VACHTENBERG OZ GLOBER ; BEYAR MORDECHAY SHAVIT RONEN VACHTENBERG OZ GLOBERMAN OREN SHASHA URI ; BEYAR MORDECHAYIL ; BOAZ SHENHAV

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RECHTSANWAELTE; WALDREN ROBIN MICHAEL ET AL; MACHTALERE GEORGES ET AL; ORR ROBERT; GRANLEESE RHIAN JANE; SCHMITZ JEAN MARIE ET AL; WEYDERT ROBERT ET AL; ORR ROBERT ET AL; BELCHER SIMON JAMES; CARPINTERO MARIO; CHIBA AKIO; ONO SHINJIRO; ITO TAKAMI; TOMITA HIROYUKI; MATSUOKA SHUHEI; SHAMOTO ICHIO; KOBAYASHI YASUSHI; KATO MASANOBU; FENSTER AND CO INTELLECTUAL PROPERTY 2002 LTD C O REED SMITH LLP; WOLF BLOCK SCHORR AND SOLIS–COHEN LLP; WOLF BLOCK SCHORR AND SOLIS COHEN LLP; MARTIN D MOYNIHAN PRTSI INC; NUTTER MCCLENNEN AND FISH LLP; FENSTER AND CO; GE EHRLICH 1995 LTD ET AL

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

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US class: 1/1 137/565.01 137/565.17 366/245 366/288 366/288P 366/297 366/309 366/309S 411/34 435/235.1 435/235.100S 435/5 435/5P 475/331 475/349 523/116 523/116S 523/117 524/423 524/423S 524/560 524/560S 604/506 606/105 606/105P 606/247 606/279 606/281 606/61 606/76 606/76P 606/80 606/80P 606/86 606/86.00R 606/86.00RP 606/86.00RS 606/86A 606/86R 606/910 606/93 606/93S 606/94 606/94P 606/94S 606/99 623/11.11 623/11.110P 623/16 623/17.11 623/17.110P 623/17.110S 623/17.16 623/17.160P 623/17.160S 623/23.47 623/23.58 623/23.580S

Classification Explorer

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Abstract:
Source: US2004167625A A kit, comprising: an expandable spacer; and a quantity of a precursor to a bio−compatible elastic material.

0) US2004122514A – BIOLOGICALLY IMPLANTABLE PROSTHESIS AND METHODS...

72) Family number: 30670129 (US2004122514A) © PatBase

Title: BIOLOGICALLY IMPLANTABLE PROSTHESIS AND METHODS OF USING THE SAME

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Family:

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A61B17/04 A61F2/24 B23P11/00 (Advanced/Invention); A61B17/00 A61B17/06 A61F2/02 A61F2/30 (Advanced/Non–invention); A61B17/04 A61F2/24 (Core/Invention); A61B17/00 A61B17/06 A61F2/02 (Core/Non–invention)

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Abstract:
Source: US2004122514A A biologically implantable prosthesis is disclosed. The prosthesis can have a circumferentially expandable wall and elements that prevent the wall from collapsing once the wall is expanded. Methods of making and using the prosthesis are also disclosed.

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Assignee(s):(std)**:** SOLARCITY CORP ; ZEP SOLAR INC

Inventor(s):(std)**:** BOBBY YANG ; ERBEN CHRISTOPH ; GONZALEZ PABLO ; HENG JIUNN BENJAMIN ; NGUYEN PETER P ; NGUYEN PETER PHUC ; PETER P NGUYEN ; REDDY ANAND J ; YANG BOBBY

Agent(s): KILPATRICK TOWNSEND AND STOCKTON LLP; WILLINK CHRISTOPHER L ET AL; YAO SHUN; GUPTA MANEESH ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B23K26/042 B23K26/08 B23K26/36 B23K26/40 B23P19/04 B25B11/00 B28D5/00 B29C47/00 C23C26/00 H01L21/304 H01L21/66 H01L21/67 H01L21/78 H01L31/02 H01L31/0224 H01L31/0352 H01L31/0443 H01L31/049 H01L31/05 H01L31/18 H02S20/25 H02S50/10 H05K3/12 (Advanced/Invention)

CPC:

H01L22/26 H01L31/18 H01L31/0516 H01L31/049 H01L31/0443 H01L31/1876 C23C26/00 H01L31/1864 H05K3/1283 H02S50/10 H02S20/25 B23P19/04 H01L21/67103 H01L31/0201 H01L31/02013 H01L31/035281 H01L31/022433 H01L31/0504 Y02P70/521 B23K26/364 B32B38/10 B32B43/006 H01L21/3043 H01L21/683 H01L21/6838 H01L21/68735 H01L21/68778 Y10T156/1179 Y10T156/1184 Y10T156/1967 Y10T156/1983 B28D5/0052 B28D5/0094 B29C47/026 H01L31/188 Y02B10/12 Y02E10/50

US class: 118/323 118/324 118/600 118/712 136/251 136/256 156/272.8 156/285 156/379.6 156/60 156/701 156/708 156/750 219/209 219/388 29/25.01 29/650 29/739 29/846 438/5 438/57 438/59 438/80

Classification Explorer

Cited documents: WO15183827 A2, WO15106170 A2, WO14124495 A1, WO14074826 A2, WO14002229 A1, WO13138802 A1, WO13068982 A1, WO13020590 A1, WO12127932 A1, WO12087462 A1, WO11017572 A2, WO09047815 A1, WO08152678 A1, WO08089657 A1, WO03098704 A1, WO0141967 A1, WO0044051 A1, US8847063 BB, US8796541 BB, US8657991 BB, US8586857 BB, US8513095 BA, US8469345 BB, US8343795 BB, US8322300 BB, US8253009 BB, US8222513 BB, US8209920 BB, US8196798 BB, US8168880 BB, US8024854 BB, US7872193 BB, US7872192 BA, US7829785 BB, US7829781 BB, US7825329 BB, US7777128 BB, US7772484 BB, US7749883 BB, US7635810 BB, US7388146 BB, US7328534 BB, US7310865 BB, US6841728 BB, US6803513 BB, US6620645 BB, US6538193 BA, US6441297 BA, US6303853 BA, US6232545 BA, US6034322 A, US5178685 A, US5118361 A, US5000655 A, US4877460 A, US4652693 A, US4577051 A, US4561541 A, US4420361 A, US4267003 A, US3459597 A, US3116171 A, US3094439 A, US2938938 A, US2016163914 AA, US2016163909 AA, US2015349703 AA, US2015349702 AA, US2015349701 AA, US2015349193 AA, US2015349190 AA, US2015349176 AA, US2015349175 AA, US2015349174 AA, US2015349173 AA, US2015349172 AA, US2015349171 AA, US2015349170 AA, US2015349169 AA, US2015349168 AA, US2015349167 AA, US2015349162 AA, US2015349161 AA, US2015349153 AA, US2015349145 AA, US2015270410 AA, US201514930616, US201514877870, US201514866817, US201514866806, US201514866776, US201514826129, US201514804306, US2015090314 AA, US2015076214 AA, US2014373892 AA, US2014353894 AA, US2014352777 AA, US2014196768 AA, US201414563867, US201414510008, US201414153608, US2014124014 AA, US2014124013 AA, US2014115894 AA, US2014000683 AA, US2013272833 AA, US2013240011 AA, US2013206221 AA, US2013206213 AA, US2013152996 AA, US2013136565 AA, US2013122639 AA, US2013122616 AA, US2013113156 AA, US2013096710 AA, US2013095578 AA, US2013065353 AA, US2013052768 AA, US2013014802 AA, US2012325282 AA, US2012318340 AA, US2012318319 AA, US2012312791 AA, US2012285533 AA, US2012279548 AA, US2012248497 AA, US2012240995 AA, US2012196029 AA, US2012152349 AA, US201213601441, US2012125391 AA, US201208508 AA, US2012060911 AA, US2012049430 AA, US2012040487 AA, US2012028404 AA, US2012000502 AA, US2011297224 AA, US2011259419 AA, US2011239450 AA, US2011179619 AA, US2011156188 AA, US201113220532, US2011065226 AA, US2010224230 AA, US2010221435 AA, US2010218799 AA, US2010193014 AA, US2010190275 AA, US2010147364 AA, US2010043863 AA, US2010037932 AA, US2009324903 AA, US2009139557 AA, US2009097956 AA, US2008203965 AA, US2008041437 AA, US2008035618 AA, US2007294883 AA, US2007283997 AA, US2005257823 AA, US2005225686 AA, US2003201007 AA, US2003121228 AA, US2003000571 AA, US2002050672 AA, US2002022132 AA, US2001026349 AA, KR20130084516 A, KR20130034910 A, KR20120096322 A, KR20100064698 A, KR101396151 B1, JP9019918 A2, JP59117235 A2, JP2011026136 A2, JP2010128407 A2, JP11192616 A2, JP11079770 A2, EP2677550 A1, EP2634818 A1, EP2521190 A1, EP2439782 A1, EP2362430 A1, EP2340556 B1, EP1973168 A2, EP1816684 A2, EP1770791 A1, EP1205982 A2, EP1057542 A2, DE4030713 A1, DE3238187 A1,

DE102012003455 A1

Forward Citations: USD786189, USD785559, US9590132, US9484484, US8263995, US2016163910, US2016027933, US2015349174,

Abstract:
Source: US2016158890A A system for scribing a photovoltaic structure is provided. During operation, a conveyor can move a photovoltaic structure along a path, and a scribing apparatus is directed toward that path to scribe a groove of a predetermined depth. In one embodiment, the groove does not penetrate an interface between a base layer and an emitter layer of the photovoltaic structure.

0) US2013246136A – DEVICE, SYSTEM AND METHOD FOR FACILITATING INTE...

74) Family number: 52839383 (US2013246136A) © PatBase

Title: DEVICE, SYSTEM AND METHOD FOR FACILITATING INTERACTION BETWEEN A WIRELESS COMMUNCATION DEVICE AND A PACKAGE

Priority: GB20120020373 20121112 US20120611222P 20120315 US20120612064P 20120316 US20130827003 20130314 WO2013US31359 20130314 US20160065207 20160309

Family:

Publication number	Publication date	Application number	Application date
CA2867453 AA	20140915	CA20132867453	20130314
CN104756146 A	20150701	CN201380025274	20130314
EP2826007 A2	20150121	EP20130713012	20130314
GB201220373 A0	20121226	GB20120020373	20121112
GB2507810 A1	20140514	GB20120020373	20121112
HK1206469 A1	20160108	HK20150106891	20150720
JP2015522856 T2	20150806	JP20150500612T	20130314
RU2014141503 A	20160510	RU20140141503	20130314
US2013246136 AA	20130919	US20130827003	20130314
US2016292697 AA	20161006	US20160065207	20160309
WO13138595 A2	20130919	WO2013US31359	20130314
WO13138595 A3	20140410	WO2013US31359	20130314
WO14072455 A2	20140515	WO2013EP73348	20131108
WO14072455 A3	20140731	WO2013EP73348	20131108

Probable Assignee: CROWN PACKAGING TECHNOLOGY INC

Assignee(s):(std)**:** CROWN PACKAGING UK PLC ; CROWN PACKAGING TECH INC ; CROWN PACKAGING TECHNOLOGY INC

Assignee(s): CROWN PACKAGING TECHNOLOGY INC11535 SOUTH CENTRAL AVENUEALSIPIL60803–2599US ; DEUTSCHE BANK NEW YORK BRANCH COLLATERAL AGENT AG AS ; MCGRILL LAURA JANE ; RAMSEY CHRISTOPHER PAUL ; MCGIRR LAURA JANE ; VAUGHAN LAURA JANE

Inventor(s):(std)**:** MCGIRR LAURA JANE ; MCGRILL LAURA JANE ; RAMSEY CHRISTOPHER PAUL ; VAUGHAN LAURA JANE ; VAUGHN LAURA JANE

Inventor(s): RAMSEY CHRISTOPHER PAULGB ; MCGRILL LAURA JANEGB ; MCGIRR LAURA JANEGB ; CHRISTOPHER PAUL RAMSEY ; LAURA JANE MCGIRR

Agent(s): GOWLING LAFLEUR HENDERSON LLP; LIND ROBERT; INO SARI; KURASAWA ICHIRO; MATSUSHITA MITSURU; DESHIMARU TAKESHI; KUMAKURA YOSHIO; FULLMER HAROLD H ET AL; RATLIFF ISMAY ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A63F13/00 A63F13/213 A63F13/216 B42D15/00 B65D1/12 B65D1/22 B65D17/00 B65D25/20 B65D41/12 B65D41/32 B65D85/00 G06F3/048 G06K19/06 G06K7/10 G06K7/14 G06Q10/08 G06Q20/32 G06Q30/00 G06Q30/02 G06Q30/06 H04W4/02 (Advanced/Invention); G06Q (Subclass/Invention)

CPC: B65D85/00 G06Q20/3276 G06Q30/02 B65D41/32 B42D15/00 B65D1/12 B65D1/22 B65D17/16 B65D17/24 B65D17/163 B65D17/165 B65D41/12 B65D2203/00 B65D2517/0052 B65D2517/0053 Y10T29/49 G09F3/0297 G06Q30/018 G06Q10/0835 H04W4/021 G06K19/06037 G06K7/10861 G06Q30/0643

US class: 206/459.1 235/375 29/592 463/29 705/14.12 705/26.7 705/27.1 705/306 705/317

Cited documents: WO13138595 A2, WO13049313 A2, WO12177077 A2, WO11107895 A1, WO05026017 A1, US8708221 BA, US6677967 BB, US6250554 BA, US6155409 A, US5939699 A, US2012219179 AA, US2012196661 AA, US2012172127 AA, US2012152781 AA, US2012085829 AA, US2011313918 AA, US2010315439 AA, US2010102117 AA, US2009319181 AA, US2009234731 AA, US2009089705 AA, US2007218980 AA, US2006181510 AA, US2005039092 AA, US2004104141 AA, US2002161640 AA, US2002056756 AA, JP3100125 U1, JP2011118600 A2, JP2011016546 A2, JP2011011454 A2, JP2010167571 A2, JP2009116525 A2, JP2006168735 A2, JP2005182416 A2, JP2005070725 A2, JP2004287037 A2, JP2004213629 A2, JP2003150745 A2, JP2002511696 T2, JP2002279268 A2, JP2002037420 A2, JP11248552 A2, GB2390592 A1, GB2354360 A1, EP1560009 A1,

DE102009027862 A1

CN101951592 A, CN101950200 A, CN101908155 A,

Forward Citations: WO15162729, WO14072455, WO14072455, US9665887, US9340368, US9259913, US2014019238, CN105691824, CN105600117, CN105501616,

Abstract:
Source: US2013246136A A method of providing a personalized experience on a wireless communication device corresponding to the contents of a package, the package containing a product may include the steps of reading a unique code on a package, the package containing a product, displaying a personalized illusory images on the wireless communication device, and altering the personalized illusory images in response to relative movement between the package and the camera.

0) US5511920A – SYSTEM AND METHOD FOR USE WHEN FORMING LIFT–TAB...

75) Family number: 12507424 (US5511920A) © PatBase

Title: SYSTEM AND METHOD FOR USE WHEN FORMING LIFT–TAB CAN END ASSEMBLIES

Priority: US19930136803 19931014

Family:

Publication number	Publication date	Application number	Application date
US5511920 A	19960430	US19930136803	19931014

Probable Assignee: ARTRIP JERRY

Assignee(s):(std)**:** ARTRIP DONALD

Assignee(s): ARTRIP JERRY

Inventor(s):(std)**:** ARTRIP DONALD

International class (IPC 8–9)**:** B21D51/38 (Advanced/Invention); B21D51/38 (Core/Invention)

International class (IPC 1–7)**:** B21D43/00 B21D51/38

CPC: B21D51/383 Y10T29/49956 Y10T29/53522

European class: B21D51/38B

US class: 29/525.06 29/818 413/12 413/14 413/16 413/25

Classification Explorer

Cited documents: US4932822 A, US4762579 A, US4723882 A, US4568230 A, US4026226 A, US3231968 A,

Forward Citations: WO16127263, WO0115830, US9637269, US9637267, US9278776, US9272819, US9187221, US9007413, US7344347, US7237999, US7237998, US7234907, US7063492, US7063492, US6926487, US6881923, US6854947, US6808351, US6802683, US6533518, US5647118, US2013251905, US2008267736, US2004123444, US2003178397, US2003116543, US2003053890, EP1986802, EP1986802, EP1328371, EP1328371, EP1113901, EP1113901, EP1055468, CN105050747,

Abstract:
Source: US5511920A A system and process for use when forming lift–tab can end assemblies wherein each can end assembly includes a lift tab having a smooth side, an opposite roughened side and a hole extending between the sides and a can end having a protruding shaft integrally formed in one face thereof utilizes a guide system for inverting a strip of metal stock through about 180 DEG as the strip is conveyed between one workstation at which lift tabs are pre–formed therein and another workstation at which the tabs are punched, so as to sever the tabs from, the strip. The punched tabs are thereafter collected in a stacked relationship and directed to a position adjacent still another workstation at which the tabs are attached, by way of the tab holes and the can end shafts, to the can ends. By inverting the strip of metal stock during the assembly–forming process, the tabs are inverted from a smooth–side–down condition to a smooth–side–up condition for attachment to the can end.

0) US4262815A – CONICAL CAN END WITH A GATE AND OPENING TAB AT ...

76) Family number: 2345562 (US4262815A) © PatBase

Title: Conical can end with a gate and opening tab at the cone apex

Priority: CA19810371583 19810224 US19800128582 19800310

Family:

Publication number	Publication date	Application number	Application date
CA1161772 A1	19840207	CA19810371583	19810224
US4262815 A	19810421	US19800128582	19800310

Probable Assignee: KLEIN GERALD B

Assignee(s):(std)**:** KLEIN GERALD B

Inventor(s):(std)**:** KLEIN GERALD B

Agent(s): G RONALD BELL AND ASSOCIATES

International class (IPC 8–9)**:** B65D17/32 B65D17/34 B65D83/14 (Advanced/Invention); B65D17/28 B65D83/14 (Core/Invention)

International class (IPC 1–7)**:** B65D17/32 B65D17/34

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/269 220/273 220/380 222/541.9

Classification Explorer

Cited documents: US4215792 A, US3403811 A, US3076584 A,

Forward Citations: WO9838100, WO08057207, WO04028912, WO0035761, USRE32927, USD747649, USD747199, USD521869, USD486358, US9637269, US9540137, US9327859, US9272819, US9139324, US8973780, US8875936, US8857644, US8844761, US8544671, US8328492, US8104319, US8052005, US8011527, US7922021, US7556168, US7350392, US7014060, US6923017, US6846449, US6789393, US6772900, US6450359, US6102242, US6010028, US6010026, US5822843, US5813561, US5778723, US5772070, US5718352, US5704240, US4793510, US4632271, US4574975, US4350261, US2011284537, US2011000251, US2010133275, US2009269169, US2009266824, US2009084789, US2009039091, US2008302797, US2008257900, US2008050207, US2005247708, US2005006388, US2004200838, US2003060350, US2003049410, US2003049294, US2003047845, US2003001788,

Abstract:
Source: US4262815A This invention concerns a conical can end wherein the central panel of the end is drawn to form a conical frustum with a ring–shaped aperture at its apex end. A recessed panel closes this aperture. A scoreline in this aperture panel defines a gate therein and an opening tab is connected to the gate and placed in the aperture. The tab is pulled or lifted to rupture the score line to open the can end. The tab may be used to remove the gate from the panel or push the gate inwardly with the gate being hinged to the aperture panel.

0) US2803932A – MACHINE FOR LOADING OPEN END CARTONS

77) Family number: 22810648 (US2803932A) © PatBase

Title: MACHINE FOR LOADING OPEN END CARTONS

Priority: US19560583866 19560509 US19570671076 19570710

Family:

Publication number	Publication date	Application number	Application date
US2803932 A	19570827	US19560583866	19560509
US2953240 A	19600920	US19570671076	19570710

Probable Assignee: RALPH W JOHNS

Assignee(s):(std)**:** BIAGIO J NIGRELLI ; RALPH W JOHNS ; ROBERT R JOHNS

Inventor(s):(std)**:** NIGRELLI BIAGIO J ; SNYDER BURTON K ; STANDLEY WENDELL E ; WITTMANN RICHARD B

International class (IPC 8–9): B65B5/10 B65G17/32 (Advanced/Invention); B65B5/10 B65G17/32 (Core/Invention)

International class (IPC 1–7): B65B5/10 B65D71/00 B65G17/42

CPC: B65G17/326 B65G2201/02 B65B5/10

European class: B65B5/10 B65G17/32C L65G201/02

US class: 198/803.13 53/168 53/247 53/253 53/48.1 53/566 53/77

Classification Explorer

Cited documents: US807541 A, US530183 A, US2770935 A, US2739430 A, US2382619 A, US2358292 A, US2307976 A, US1653035 A, FR992684 A,

Forward Citations: WO9613430, WO8807329, WO8807329, US6158575, US6006891, US5564556, US5502950, US4918788, US4340380, US4332123, US3897895, US3780909, US3656417, US3134309, US3118531, US3110033, US3040635, US3034270, US3031812, EP0829428, DE1128799, AU692928, AU609473,

Abstract:
Source: US2803932A (Claim 1) 1. In a loading machine for open ended, can receiving cartons of the type having a hinged can ch_me retaining– tab spaced inward from the open end of the carton and formed within the contour of a wall witli _,vhich a can end is adapted to contact, a conveyer member adapted to carry such open end cartons at right angles to the carton axes throu.–h the open ends, means for delivering a cai into a carton carried by the conveyer so that the can end is in contact with the carton wall that carries the retaining tab, means for moving a can within the carton to a position in which the can is disposed inwardly of the tabhinge, means for driving the conveyer, and means operable in time with the conveyer to exert pressure against 'Lhe free portion of a tab to ca_ise it to swing upon its hinge through a substaiitial angle while the wall of the carton that carries the retaining tab is supported from inward movement by the can positioned within the carton.

0) US3793763A – INSECTICIDE DISPENSER

78) Family number: 30959968 (US3793763A) © PatBase

Title: INSECTICIDE DISPENSER

Priority: US19710212232 19711227 US19710212237 19711227 US19710212561 19711227

Family:

Publication number	Publication date	Application number	Application date
GB1345500 A	19740130	GB19720058820	19721220
JP48074384 A2	19731006	JP19730004110	19721227
JP53026191 B4	19780731	JP19730004110	19721227
US3744666 A	19730710	US19710212561	19711227
US3764038 A	19731009	US19710212232	19711227
US3793763 A	19740226	US19710212237	19711227

Probable Assignee: H T MCGILL INC

Assignee(s):(std)**:** ALUMINUM CO OF AMERICA ; H T MCGILL INC

Assignee(s): H T MCGILL INC US ; ALUMINUM CO OF AMERICA US ; ALUMINUM CO US

Inventor(s):(std)**:** HEFFNER R ; YOUNG M ; GRIFFIN J ; GRIFFIN C

Inventor(s): HEFFNER R US ; GRIFFIN C US ; GRIFFIN J US ; YOUNG M US

International class (IPC 8–9)**:** B65D17/00 B65D17/32 B65D17/34 B65D17/347 B65D17/353 (Advanced/Invention); B65D41/42 (Advanced/Non–invention); B65D17/00 B65D17/28 (Core/Invention); B65D41/32 (Core/Non–invention)

International class (IPC 1–7)**:** A01M1/20 B65D17/00 B65D17/16 B65D17/20 B65D17/24 B65D17/32 B65D41/42

CPC: B65D17/16 B65D17/165 A01M1/06 A01M1/2072 A01M1/2077

European class: A01M1/06 A01M1/20C4F A01M1/20C4G B65D17/16 B65D17/16B2

US class: 220/269 220/273 220/48 43/12.9 43/129

Classification Explorer

Cited documents: US3694146 A, US3250723 A, US2758412 A,

Forward Citations: WO9527660, WO9527660, US9010561, US7922025, US7721906, US7478766, US7178743, US6854208, US6675528, US6523298, US6484438, US6062408, US5566502, US5335446, US4860488, US4387827, US4108331, US4051976, US4019648, US3967753, US3891117, US3868918, US3826402, US2015001220, US2014079586, US2010032433, US2010018976, US2009183689, US2008067174, US2008067171, US2005284958, US2005284951, US2004128908, JP59133442, JP55058924, JP2014527003, JP1137462, GB2291030, GB2125762, FR2718415, FR2408530,

Abstract:
Source: US3793763A An insecticide dispenser having a housing with a blower mounted therein and an offset thereon for receiving an insecticide pellet container, the housing defining two outlets for said blower one extending to said offset to direct flow through said container and the other outlet being directed to intercept flow out of said container, means for controlling the flow to said outlets, a heater in said housing to heat the air flowing to said containers, means for controlling the heater responsive to the temperature of gas flowing through said container, a heater shield, a manual reset excess temperature cut–off being so mounted in said housing to prevent its ready resetting and a timer for controlling operation of said blower and said heater.

0) USRE30349E – EASY–OPENING CONTAINER WALL WITH CORELINE VENT

79) Family number: 24050382 (USRE30349E) © PatBase

Title: Easy–opening container wall with coreline vent

Priority: US19670632630 19670421 US19700010660 19700102

Family:

Publication number	Publication date	Application number	Application date
USRE30349 E	19800729	US19700010660	19700102

CPC: B65D17/163 B65D2205/00

European class: B65D17/16B1 L65D205/00

US class: 220/271

Classification Explorer

Cited documents: US3450300 A, US3381848 A, US3366270 A, US3322296 A, US3301432 A, US3283946 A, US3273744 A, US3251503 A, US3215305 A,

Forward Citations: USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD691039, US9446879, US9233784, US8939308, US8567158, US7975884, US7922025, US7721906, US5038956, US2011303672, US2011056945, US2008067174, US2008067171, US2008011786, US2004144787,

Abstract:
Source: USRE30349E This disclosure describes an easy–opening container wall having a wall segment at least partially removable therefrom. A tab is secured to the container wall for initiating severance of the wall segment from the container wall. A rupturable scoreline is formed in the container wall adjacent the tab and rupturable in response to movement of the tab to initiate severance of the wall segment from the container wall.

0) US4574683A – WEAPON SYSTEM

80) Family number: 2487801 (US4574683A) © PatBase

Title: Weapon system

Priority:
CA19830439962 19831028 CA19830502586 19831028 CA19860502586 19860224
CA19860502587 19860224 CA19830502588 19831028 CA19830502587 19831028
US19820437853 19821029 US19840680799 19841213 CA19860502588 19860224
US19850761917 19850802 US19850761916 19850802 US19850761479 19850802

Family:

Publication number	Publication date	Application number	Application date
CA1219157 A1	19870317	CA19830439962	19831028
CA1222403 A1	19870602	CA19830502588	19831028
CA1222403 A2	19870602	CA19860502588	19860224
CA1222405 A1	19870602	CA19830502586	19831028
CA1222405 A2	19870602	CA19860502586	19860224
CA1223471 A1	19870630	CA19830502587	19831028
CA1223471 A2	19870630	CA19860502587	19860224
US4574683 A	19860311	US19840680799	19841213
US4601230 A	19860722	US19850761917	19850802
US4638715 A	19870127	US19850761916	19850802
US4660704 A	19870428	US19850761479	19850802

Probable Assignee: GENERAL DYNAMICS LAND SYSTEMS INC

Assignee(s):(std)**:** GEN MOTORS CORP

Assignee(s): GENERAL DYNAMICS LAND SYSTEMS INC ; GENERAL MOTORS CORP ; LEBLANC RICHARD S

Inventor(s):(std)**:** LEBLANC RICHARD S

Agent(s): GOWLING LAFLEUR HENDERSON LLP

International class (IPC 8–9)**:** F41A19/10 F41A27/18 F41A9/54 F41H7/03 (Advanced/Invention); F41A19/00 F41A27/00 F41A9/00 F41H7/00 (Core/Invention)

International class (IPC 1–7)**:** B65G11/00 B65G11/10 F41F21/08 F41F23/00 F41H7/06

CPC: F41A19/10 F41A9/54 F41A27/18 F41H7/03

European class: F41A19/10 F41A27/18 F41A9/54 F41H7/03

US class: 193/25AC 193/38 200/153T 89/1.2 89/28.2 89/33.04 89/33.14 89/33.4 89/330.4 89/34 89/36.13 89/37.07 89/37.12 89/40.03 89/41.12

Classification Explorer

Cited documents: US4433609 A, US4338851 A, US4138603 A, US3995527 A, US3854377 A, US3759136 A, US3140639 A, US2983197 A, US2794369 A, US2442164 A, US2400385 A, US2368191 A, US2363219 A, US2357209 A, US2305667 A, US1407633 A, SE301283 B, GB878976 A, GB582509 A, GB538808 A, GB1157234 A, FR2229944 A1, FR1147807 A,

Forward Citations: WO17080800, WO05033611, US9631902, US9546847, US9285175, US9194664, US8910559, US8850950, US8573109, US8434397, US8297170, US8151684, US8069767, US7669513, US7086318, US5684265, US4972758, US2016161224, US2015267989, US2014311325, US2010294120, US2010294119, US2009120271, US2009114085, US2007119296, EP1671075, EP0430655,

Abstract:
Source: US4574683A A weapon system including a main gun using link fed ammunition and a co–axially mounted machine gun mounted in a turret rotatably positionable in an armored vehicle. The spent links for the main gun and the spent machine gun links and brass are ejected through the trunnion bearing on which the rotor for the main gun rotates and into a compartment which communicates with the exterior of the vehicle. The linked ammunition for the main gun is stored in a rectangular shaped ammunition box positioned diametrically in the turret basket. The manual trigger and main gun elevation assembly includes a mechanical connection between the trigger and the trigger switch which does not rotate with the trigger and handwheel. The link eject chutes for

the main gun, which can be a dual fed 25 millimeter gun, include guide strips for guiding the tab members of the links through the chute channels and thereby preventing jamming.

0) US5148935A – VENTING RESEALABLE CONTAINER CLOSURE AND ASSOCI...

81) Family number: 5149750 (US5148935A) © PatBase

Title: Venting resealable container closure and associated closure container–combination

Priority: US19900601453 19901022

Family:

Publication number	Publication date	Application number	Application date
US5148935 A	19920922	US19900601453	19901022

Probable Assignee: ALUMINUM CO OF AMERICA

Assignee(s):(std)**:** ALUMINUM CO OF AMERICA

Assignee(s): ALUMINUM COMPANY OF AMERICA ; ALUMINUM CO

Inventor(s):(std)**:** LYON JAY W

International class (IPC 8–9)**:** B65D51/16 (Advanced/Invention); B65D51/16 (Core/Invention)

International class (IPC 1–7)**:** B65D51/16

CPC: B65D51/1666

European class: B65D51/16D3B

US class: 220/203 220/203.09 220/208 220/258 220/258.5 220/259 220/266 220/268 220/278 220/306 220/336 220/366 220/820

Classification Explorer

Cited documents: US4993572 A, US4991732 A, US4982862 A, US4957216 A, US4932555 A, US4930655 A, US4928844 A, US4865215 A, US4799598 A, US4783985 A, US4685849 A, US4673099 A, US4648528 A, US4580692 A, US4463866 A, US4148410 A, US4024981 A, US3997076 A, US3977341 A, US3938693 A, US3929251 A, US3762595 A, US3651981 A, US3393818 A, US3373889 A,

Forward Citations: US9315290, US8931656, US8833585, US8640905, US8336726, US8336725, US8240498, US8215513, US7918359, US5826737, US2011233227, US2010294768, US2009179033, US2009173737, US2008110887, US2007262079, US2007068943,

Abstract:
Source: US5148935A A cap for substantially gas–tight sealing engagement with a container wall having an opening therein circumscribed by a sealing surface has an end wall and a depending skirt with a portion for securing the cap to a container wall, and a tab for manual engagement to rotate the cap between a container wall sealing surface engaging position and a storage position. The cap has a vent region provided by a weakened zone that is preferably located on or near the tab. The weakened area may include removal of a portion of the cap skirt, thinning a portion of the cap skirt, variations in wall thickness of portions of the cap skirt or top wall in a predetermined manner, configurating the portion of the tab which connects with the cap in such a manner as to facilitate ready circumferential expansion of the cap. Combinations of these weakening features may be employed. The cap is adapted once in gas–tight sealing engagement with the sealing surface of the container wall to vent in the weakened zone upon predetermined internal container, pressure being attained and, subsequently, automatically resealed. A container in combination with such a cap is also disclosed.

0) US6206222B – RESEALABLE CLOSURE ON SEAMED CAN END

82) Family number: 20666206 (US6206222B) © PatBase

Title: RESEALABLE CLOSURE ON SEAMED CAN END

Priority: US19970057387P 19970828 US20000486484 20000515 WO1998US17843 19980828

Family:

Publication number	Publication date	Application number	Application date
AU199892086 A1	19990316	AU19980092086	19980828
US6206222 BA	20010327	US20000486484	20000515
WO9910242 A1	19990304	WO1998US17843	19980828

Probable Assignee: BALL CORP

Assignee(s):(std)**:** BALL CORP ; CUDZIK DANIEL F

Inventor(s):(std)**:** CUDZIK DANIEL F ; DANIEL F CUDZIK

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GE GH GM GN GR GW HU ID IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT UA UG US UZ VN YU ZW

International class (IPC 8–9): B65D1/16 B65D17/44 B65D25/42 B65D51/16 B65D51/22 (Advanced/Invention)

International class (IPC 1–7): B65D17/44

CPC: Y10S220/906 B65D51/222 B65D1/165 B65D17/161 B65D25/42 B65D51/1688 B65D2251/0015 B65D2251/0071

European class: B65D1/16B B65D17/16B B65D25/42 B65D51/16E3 B65D51/22 B65D51/22A1 L65D251/00Y2D L65D251/00Y6A

US class: 220/258 220/258.3 220/278 220/906 222/541.8 222/83.5 413/15 413/22 413/23

Classification Explorer

Cited documents: US5348182 A, US5292025 A, US4911323 A, US3339812 A, IT531817 A, FR87609 E, FR1442319 A,

Forward Citations: WO13018110, WO07054568, WO06119599, WO04024574, USD747649, USD747199, USD745399, USD745398, USD745397, USD745396, USD744833, USD713267, USD712753, USD707569, USD707568, USD684483, USD677585, USD677584, USD675527, USD672663, USD671834, USD670167, USD663622, USD663210, USD661204, USD661203, USD658078, USD656042, USD653563, USD653562, USD653126, USD653125, USD653124, USD653123, USD652742, USD652741, USD652740, USD651527, USD651526, USD649887, USD641261, USD639164, USD638708, USD638311, USD632190, USD632189, USD632188, USD632187, USD631759, USD626015, USD625616, USD624438, USD622145, USD621724, USD621723, USD620377, USD620360, USD619459, USD619458, USD619457, USD615877, USD614970, USD614969, USD614049, USD612732, USD607754, USD607727, USD607330, USD607329, USD606406, USD606405, USD606404, USD606403, USD606402, USD601436, USD599678, USD599677, USD596958, USD596957, USD596956, USD596955, USD596505, USD596504, USD596503, USD596502, USD596501, USD596500, USD596048, USD593876, USD588021, USD588020, USD588019, USD588018, USD588017, USD588016, USD587137, USD554000, US9637269, US9493284, US9272819, US9216840, US8985371, US8857644, US8844761, US8720717, US8701887, US8631958, US8517176, US8215513, US8141741, US8016148, US7427005, US7261216, US2015274391, US2014042164, US2010059517, US2010059516, US2010025281, US2010025279, US2009218346, US2009212004, US2009101651, US2008302797, US2008302756, US2008156820, US2008011702, US2004026422, US2004007587, ITVI20110100, EP1686066, DE102005004759,

Abstract:
Source: US6206222B An easy–open, reseable closure assembly for a beverage can (10) comprises a metal lid (12) and two threadedly connected molded plastic closure elements (40, 60) with engageable annular reseal surfaces (46, 76). The lid is scored (30) to define a circular tear panel (28) and a hinge (32). The spout element (40) is attached to the lid (12) with the bottom surface of the cap element (60) directly above and aligned with the

periphery of the tear panel (28). Rotation of the cap element (60) by a user ruptures the tear panel and pivots the tear panel (28) downward about the hinge (32), providing a passage through the spout element (40) for pouring and driking. Initial rupture and rupture propagation of the tear panel (28) is controlled by the spacing of the cap element (60) from the tear panel (28) and their configurations. When the cap element (60) is replaced on the spout (40), reseal surfaces (46, 76) engage.

0) US4790705A – METHOD OF FORMING A BUCKLE RESISTANT CAN END

83) Family number: 2785739 (US4790705A) © PatBase

Title: Method of forming a buckle resistant can end

Priority: US19800112569 19800116 US19810307209 19810930 US19870013599 19870211 US19870014179 19870211

Family:

Publication number	Publication date	Application number	Application date
AU198059746 A1	19810723	AU19800059746	19800627
AU541926 B2	19850131	AU19800059746	19800627
GB2067159 A1	19810722	GB19800029634	19800912
GB2067159 B2	19831026	GB19800029634	19800912
IT1170634 A	19870603	IT19810047591	19810116
IT8147591 A0	19810116	IT19810047591	19810116
JP56107323 U1	19810820	JP19800142625U	19801006
US4790705 A	19881213	US19870013599	19870211
US4809861 A	19890307	US19870014179	19870211

Probable Assignee: AMERICAN NATIONAL CAN CO

Assignee(s):(std)**:** AMERICAN NAT CAN CO ; AMERICAN NATIONAL CAN CO ; AMERICAN CAN CO

Assignee(s): AMERICAN CAN COMPANY ; AMERICAN NATIONAL CAN COMPANY ; REXAM BEVERAGE CAN CO

Inventor(s):(std)**:** LANGSEDER N E ; LANGSEDER NEAL E ; WILKINSON H E ; WILKINSON HARLAN E ; WILKINSON HARLEN E

Inventor(s): H E WILKINSON ; HARLEN E WILKINSON ; HE WILKINSON ; N E LANGSEDER ; NE LANGSEDER ; NEAL E LANGSEDER

Agent(s): PHILLIPS ORMONDE FITZPATRICK

International class (IPC 8–9): B21D51/44 B65D17/28 B65D17/34 B65D6/34 B65D8/08 B65D8/12 B65D8/18 B65D8/20 B65D81/20 (Advanced/Invention); B21D51/38 B65D17/28 B65D6/00 B65D8/04 B65D81/20 (Core/Invention); B66B (Subclass/Invention)

International class (IPC 1–7): B21D51/44 B65D17/28 B65D17/34 B65D6/34 B65D8/08 B65D8/12 B65D8/18 B65D8/20 B66B

CPC: B65D7/36 B65D7/44

European class: B65D7/36 B65D7/44

US class: 220/623 220/66 413/56 413/8

Classification Explorer

Cited documents: US4567746 A, US4254886 A, US4217843 A, US4210259 A, US4163504 A, US4109599 A, US4093102 A, US4037550 A, US4031837 A, US3912154 A, US3900128 A, US3858754 A, US3843014 A, US3774801 A, US3731838 A, US3730380 A, US3715054 A, US3638825 A, US3591038 A, US3580464 A, US3525455 A, US3441170 A, US3417898 A, JP54079789 A2, JP49096887 A2,

Forward Citations: WO8910216, WO05032953, WO03059764, WO03006329, WO03006329, WO03004716, WO03004716, USD669781, USD649049, USD647400, USD643718, USD641623, USD641622, USD641239, USD559680, USD480304, US9566634, US9499299, US9371152, US9260217, US8998027, US8939695, US8939308, US8931660, US8727169, US8505765, US8328041, US8313004, US8235244, US8205477, US8011527, US7938290, US7819275, US7748563, US7743635, US7673768, US7506779, US7500376, US7380684, US7341163, US7100789, US7000797, US6935826, US6877941, US6848875, US6761280, US6748789, US6736283, US6702538, US6702142, US6561004, US6516968, US6499622, US6460723, US6419110, US6408498, US6386013, US6173857, US6102243, US6089072, US6065634, US6024239, US5833087, US5718143, US5685189, US5645189, US5598734, US5590807, US5527143, US5356256, US5046637, US4823973, US2012292329, US2011204055, US2011056945, US2011031256, US2010243663,

US2010059530, US2009180999, US2009120943, US2009039091, US2009020543, US2007007294, US2006071005, US2006042344, US2005247717, US2005029269, US2005006395, US2004211786, US2004140312, US2004074911, US2003202862, US2003173367, US2003121924, US2003080132, KR100909194, JP7071710, GB2218024, GB2218024, EP2497717, EP1470052, EP1434894, EP0340955, DE3046726, AU608443, AU2003207518, AU2002354810, AT385738,

Abstract:
Source: US4790705A A buckle resistant end for containers which is formed with an inwardly bowed countersink wall, a countersink groove defined by two unequal radii and a central panel wall stretched taut by accentuated doming.

0) US2007154254A – MOUNTING APPARATUS USING BALL AND SOCKET JOINTS...

84) Family number: 34712359 (US2007154254A) © PatBase

Title: MOUNTING APPARATUS USING BALL AND SOCKET JOINTS WITH GRIPPING FEATURES

Priority:

EP20060772124	20060606	US20060324994	20060103	US20060637611	20061212
US20070715817	20070307	US20070803143	20070511	US20070801234	20070509
US20070901254	20070914	US20080058519	20080328	US20080152273	20080512
US20080068229P	20080304	US20090380979	20090304	US20070895020	20070822
US20080204194P	20081231	US20090426960	20090421	WO2006US21703	20060606
US20090610855	20091102	US20090614400	20091107	US20090651406	20091231
US20110006434	20110114	WO2007US25463	20071212	US20110216250	20110824
WO2008US06038	20080509	US20120555099	20120721	US20120553821	20120720
US20140293671	20140602				

Family:

Publication number	Publication date	Application number	Application date
AU2006335293 AA	20070719	AU20060335293	20060606
CA2649539 AA	20081217	CA20062649539	20060606
CA2649539 C	20141007	CA20062649539	20060606
CN101194127 A	20080604	CN200680014881	20060606
CN101194127 B	20130327	CN200680014881	20060606
CN101542142 A	20090923	CN200880000731	20080509
CN101542142 B	20120718	CN200880000731	20080509
CN101621942 A	20100106	CN200780045951	20071212
CN101621942 B	20120201	CN200780045951	20071212
CN101994753 A	20110330	CN201010530478	20071212
CN101994753 B	20140312	CN201010530478	20071212
CN102003599 A	20110406	CN201010530385	20071212
CN102062281 A	20110518	CN201010530228	20071212
CN102062281 B	20141001	CN201010530228	20071212
DE202006021110 U1	20121025	DE200620021110U	20060606
DE602006031750 D1	20121018	DE200660031750T	20060606
EP1969244 A2	20080917	EP20060772124	20060606
EP1969244 A4	20100721	EP20060772124	20060606
EP1969244 B1	20120829	EP20060772124	20060606
EP1969244 B8	20121003	EP20060772124	20060606
IN01500MN2008 A	20081017	IN2008MN01500	20080715
JP2009522516 T2	20090611	JP20080548496T	20060606
JP5031769 B2	20120926	JP20080548496T	20060606
KR20090016441 A	20090213	KR20087019034	20080801
US2007154254 AA	20070705	US20060324994	20060103
US2007212163 AA	20070913	US20070801234	20070509
US2008035807 AA	20080214	US20060637611	20061212
US2008056808 AA	20080306	US20070715817	20070307
US2008069630 AA	20080320	US20070901254	20070914
US2008093516 AA	20080424	US20070803143	20070511
US2008217493 AA	20080911	US20080058519	20080328
US2009101772 AA	20090423	US20080152273	20080512
US2010041300 AA	20100218	US20090380979	20090304
US2010259144 AA	20101014	US20090610855	20091102
US2010264281 AA	20101021	US20090614400	20091107
US2010308198 AA	20101209	US20090651406	20091231

US2010314508 AA	20101216	US20070895020	20070822	
US2011108683 AA	20110512	US20110006434	20110114	
US2011199759 AA	20110818	US20090426960	20090421	
US2012091305 AA	20120419	US20110216250	20110824	
US2013168512 AA	20130704	US20120555099	20120721	
US2013170239 AA	20130704	US20120553821	20120720	
US2016053935 AA	20160225	US20140293671	20140602	
US7891615 BB	20110222	US20070801234	20070509	
US8096026 BB	20120117	US20060637611	20061212	
US8251536 BB	20120828	US20090426960	20090421	
US8297566 BB	20121030	US20070803143	20070511	
US8366341 BB	20130205	US20110216250	20110824	
US8696153 BB	20140415	US20120553821	20120720	
US8740160 BB	20140603	US20110006434	20110114	
WO07081388 A2	20070719	WO2006US21703	20060606	
WO07081388 A3	20071101	WO2006US21703	20060606	
WO08073488 A2	20080619	WO2007US25463	20071212	
WO08073488 A3	20081218	WO2007US25463	20071212	
WO08109152 A2	20080912	WO2008US03061	20080307	
WO08109152 A3	20081218	WO2008US03061	20080307	
WO08140806 A1	20081120	WO2008US06038	20080509	

Probable Assignee: DAYMEN US

Assignee(s):(std)**:** DAYMEN US INC ; JOBY INC ; FRYKMAN PETER ; JOBY INT SARL ; JOBY INTERNAT SARL ; JOBY PHOTO INC ; MINN KENNETH ; BEVIRT JOEBEN ; DAY MEN US INC ; POLITO FREDITALO

Assignee(s): ANTARES CAPITAL LP SUCCESSOR AGENT AS ; DAYMEN US ; JOBY PHOTOINC ; JOBY PHOTO INC1010 FAIR AVE.SANTA CRUZCA95060US ; DAYMEN US INC1435 N. MCDOWELL BLVD.PETALUMACA94954US ; GENERAL ELECTRIC CAPITAL AGENT AS CORP ; JOBY INTERNATIONAL SARL

Inventor(s):(std)**:** FRYKMAN PETER ; JOEBEN BEVIRT ; MINN KENNETH ; PETER FRYKMAN ; POLITO FREDITALO ; BEVIRT JOEBEN

Inventor(s): BEVIRT JOEBEN SANTA CRUZ ; BEVIRT JOEBENUS

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; GOWLING LAFLEUR HENDERSON LLP; HOFSTETTER SCHURACK AND PARTNER PATENT U RECHTSANWALTSKANZLEI PARTG MBB; SCHURACK EDUARD F; HOFSTETTER SCHURACK AND PARTNER; MICHAEL A GUTH; BEYER LAW GROUP LLP; MICHAEL A; GUTH MICHAEL A

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A44B21/00 A44B99/00 A47B83/00 A47B96/06 A63H3/16 F16B1/00 F16B2/20 F16B47/00 F16B7/10 F16B7/14 F16B7/20 F16C11/06 F16C11/08 F16D1/00 F16L3/00 F16M11/00 F16M11/02 F16M11/04 F16M11/14 F16M11/18 F16M11/20 F16M11/22 F16M11/24 F16M11/40 F16M13/00 F16M13/02 F21L4/04 F21V13/02 F21V21/14 F21V5/00 F21V9/08 G01C5/00 G03B17/00 G03B17/56 H05K5/02 (Advanced/Invention); F16M11/04 F16M11/14 F16M11/16 F16M11/20 F16M11/24 (Advanced/Non–invention); A44B99/00 A47B96/06 A63H3/00 F16B47/00 F16B7/00 F16C11/06 F16M11/00 F16M11/02 F16M11/20 F16M13/00 G01C5/00 G03B17/56 (Core/Invention)

International class (IPC 1–7): F16M13/00

CPC: Y10S24/91 F21V21/14 F16B47/006 F16M2200/065 G03B17/566 G03B2215/0514 F16C11/06 F16M11/2078 F16M2200/061 F16M11/36 F16M11/14 Y10T403/32008 Y10T403/32032 Y10T403/45 Y10T24/3439 Y10T24/344 Y10T24/3441 Y10T24/3485 Y10T403/7094 Y10T403/32631 F16C11/0661 F16M13/022 G03B17/561 F16M13/00

F16M11/041 F16M11/16 F16M11/40 F16M2200/08 F21L4/005

European class: F16B47/00L F16C11/06 F16M11/04 F16M11/04A F16M11/14 F16M11/16 F16M11/20A3E F16M11/32 F16M11/36 F16M11/40 F16M13/00 F16M13/02A G03B17/56 R16M200/06A R16M200/08

US class: 24/335 24/336 24/337 24/370 24/910 248/106 248/121 248/121P 248/126 248/163.1 248/163.100P 248/168 248/176.1 248/176.100 248/176.100S 248/177.1 248/180.1 248/181.1 248/181.100 248/181.100P 248/187.1 248/188.8 248/188.800S 248/206.1 248/224.7 248/225.11 248/231.81 248/231.810 248/310 248/310S 248/314 248/315 248/315S 248/316.7 248/316.700P 248/316.700S 248/440.1 248/440.100P 248/440.100S 248/73 248/74.3 312/223.1 312/223.100S 312/237 312/237P 33/290 362/187 362/187P 362/190 362/190S 362/191 362/277 362/277S 362/418 362/418S 362/427 362/427S 396/428 403/122 403/122S 403/220 403/220S 403/381 403/53 403/53S 403/56 403/56P 403/56S 446/97

Classification Explorer

Cited documents: USRE38897 E, USRE36883 E, USD574700 S1, US7891615 BB, US7828256 BB, US7658556 BB, US7533906 BB, US7409153 BB, US7364320 BB, US7344320 BB, US7296909 BB, US7290740 BB, US7254895 BA, US7185862 BA, US7163181 BB, US7138297 BB, US7128297 BB, US7077582 BB, US7035092 BB, US7007908 BB, US6988846 BB, US6853283 BA, US6767153 BA, US6749166 BB, US6740812 BB, US6739787 BA, US6729778 BA, US6692332 BB, US6672788 BB, US6648376 BB, US6626210 BB, US6540184 BB, US6490957 BA, US6443343 BB, US6435738 BA, US6408524 BA, US6357710 BA, US6352227 BA, US6196504 BA, US6196504, US6173725 BA, US6173725, US6074270 A, US6068224 A, US6033284 A, US5997047 A, US5913706 A, US5911395 A, US5857241 A, US5851036 A, US5839173 A, US5806964 A, US5785286 A, US5765938 A, US5752869 A, US5752097 A, US5740586 A, US5655736 A, US5647565 A, US5620352 A, US5597102 A, US5540368 A, US5531625 A, US5489075 A, US5449206 A, US5398176 A, US5381989 A, US5356038 A, US5276596 A, US5119203 A, US5103384 A, US5046764 A, US5043750 A, US4979709 A, US4929973 A, US4907769 A, US4739801 A, US4570887 A, US4536116 A, US4525052 A, US4397145 A, US4250601 A, US4096552 A, US4085915 A, US4057816 A, US4016583 A, US3928894 A, US3807675 A, US3612462 A, US3423056 A, US3356325 A, US3329967 A, US3306634 A, US3006052 A, US2961693 A, US2887974 A, US2824503 A, US2791950 A, US2752726 A, US2684822 A, US2662335 A, US2559464 A, US2009101772 AA, US2008283697 AA, US2008267613 AA, US2008265111 AA, US2008232097 AA, US2008093516 AA, US2008069630 AA, US2008056808 AA, US2007212163 AA, US2007154254 AA, US2006285844 AA, US2006226309 AA, US2006175482 AA, US2005205734, US2005205730 AA, US2005205724 AA, US2005098692 AA, US2005082824 AA, US2004211868 AA, US2004118985 AA, US2004047052 AA, US2003180088 AA, US2003066937 AA, US2002167806 AA, US1255577 A, US06196504, US06173725, JP8093992 A2, JP63106993 U1, JP63106993 U, JP6240397 U, JP62040397 U1, JP62040397 U, JP62040397 U, JP61197395 U1, JP61197395 U, JP61197395 U, JP54160147 U1, JP54160147 U, JP54160147 U, JP5145816 A2, JP3083660 U, JP3083660 U, JP2005260522 A2, JP2004317578 A2, JP2000056391 A2, JP10133272 A2, JP10133272, FR1098836 A, EP0541488 A2, DE854100 A, DE3011798 A1, DE20213278 U1, DE10238706 A1, CN1494997,

Forward Citations: WO16134189, WO16077149, WO15140092, WO14145323, WO14032739, WO13078475, WO09131596, USD782464, USD758474, USD738434, USD725660, USD716642, USD714394, USD709965, USD709964, USD709565, USD709564, USD709563, USD709562, USD709561, USD709560, USD709559, USD708677, USD678297, USD664032, USD633660, USD607917, USD607036, USD605935, USD589332, USD574700, US9636595, US9632575, US9631771, US9626849, US9613423, US9606580, US9581291, US9571757, US9554064, US9554063, US9553910, US9549124, US9544485, US9539520, US9537968, US9517351, US9511395, US9489745, US9474891, US9468784, US9454820, US9448588, US9440070, US9418441, US9417509, US9399126, US9393711, US9393430, US9393401, US9389491, US9341306, US9333334, US9233244, US9232966, US9182077, US9158371, US9158334, US9158332, US9089986, US9066421, US9022310, US9016658, US9004799, US8985538, US8857775, US8827760, US8827102, US8740160, US8696153, US8620152, US8465216, US8387783, US8297566, US8215025, US8197149, US8157225, US8087836, US7891615, US7665698, US2017072872, US2017059088, US2016106470, US2016059785, US2015360265, US2015358044, US2015351531, US2015301560, US2015104994, US2015056002, US2015021371, US2014346306, US2014326847, US2014326839, US2014224947, US2014112704, US2014088649, US2014077022, US2013273805, US2013270758, US2013247912, US2013200237, US2013170239, US2013153718, US2013099075, US2013047813, US2013032679, US2012288268, US2012287268, US2012234429, US2012207462, US2012175474, US2012037778, US2012019113, US2012008309, US2011108683, US2011084038, US2011042536, US2011042530, US2011031359,

US2011024596, US2010308198, US2010294908, US2010221062, US2010220992, US2010137066, US2010034579, US2009039213, US2008283697, US2008267613, US2008265111, US2008251662, US2008093516, US2008056808, US2007212163, US2007152117, TWI499735, TWI417463, KR20150008032, JP2013540532, ITBA20130022, GB2517495, GB2517495, GB2492418, GB2470898, GB2470898, FR3018894, FR2940824, EP2922287, EP2322839, EP2322839, EP2282104, EP2282104, DE102016002298, CN104154397, CN103847643, CN103090250,

Abstract:
Source: US2007154254A The present invention is directed towards ball and socket joint connectors which, when interconnected, form a flexible assembly. In some embodiments, the ball and socket joint connectors are designed and constructed such that the interference fit of the ball and socket causes creep in the material resulting in more even frictions in the various ball and socket joints. In some embodiments, the ball and socket joint connectors utilize an over−molded strip around the outside of the connector to facilitate in their use for gripping. In an exemplary embodiment utilizing the aforementioned ball and socket joint connectors, a tripod apparatus uses legs comprising the ball and socket joint connectors for support and for gripping objects.

0) FR1404221A – PATTE DE TIRAGE ROTATIVE POUR L'OUVERTURE FACIL...

85) Family number: 21350321 (FR1404221A) © PatBase

Title: PATTE DE TIRAGE ROTATIVE POUR L'OUVERTURE FACILE D'UNE BOITE PAW PRINT ROTARY TO OPEN AN EASY BOX (Machine translation)

Priority: FR19640984998 19640812

Family:

Publication number	Publication date	Application number	Application date
FR1404221 A	19650625	FR19640984998	19640812

Probable Assignee: CONTINENTAL CAN CO

Assignee(s):(std): CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC

International class (IPC 8–9): B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/34

CPC: B65D17/165

European class: B65D17/16B2

Classification Explorer

Forward Citations: EP0463150,

Abstract:
Source: FR1404221A (Claim 1) It includes a part of starting a tab drawing, a fastener securing said pull tab has said part starting to cause rupture of the container of said element along said line of weakness and to limit the pivotal movement of said pull tab, and said element of the container having a projection in the path of pivotal movement of said pull tab and intended to be brought into contact with the pull tab, said projection including an end ramp opposing generally to said pull tab such that when the pull tab is rotated against said projection, said pull tab mounted on said ramp and said projection to thereby exert a lifting force on said portion departing through the intermediary of the fastening device in order to cause rupture of the initial 'element of the container, 20 That part of the container element which is fixed to the pull tab is flat and the general way pull tab is pressed firmly against it, 30 That projection is in axial alignment with said detachable part, 40 Such projection has an arcuate profile and the center of said fixing device as a center of curvature; said end of the container 50 of the type a ture easy opening comprises an end panel and an upright portion forming stapling surrounding it, said end panel having a detachable part defined by a line of weakness, said removable portion including a portion of departure, a pull tab completely embedded in said end of the container, a fixing device for fixing said pull tab has said part starting with a view to a pivotal movement, said end panel having a protrusion on the path of pivotal movement of the pull tab, said projection including an end ramp opposing generally to the pull tab so that when the tab Drawing is rotated against the stud pull tab mounted on the ramp and the projection thereby lifting the pull tab and exerting a lifting force on the starting, by the intermediary of the fastening device, sufficient to cause rupture of said initial end panel; 6 "Said pull tab is tightened against said end panel by said fastener; 70 The distance between the center of said fixing device and all elements of said part forming stapling is greater than the distance from the center of the fixing device at a remote end of said pull tab of way that the pull tab does not come into contact with the stapling portion; 3 "Said end of the container is circular and said fixing device is arranged in the center.

0) US2014103062A – LARGE BOTTLE VENDING APPARATUS AND METHOD

86) Family number: 53817935 (US2014103062A) © PatBase

Title: LARGE BOTTLE VENDING APPARATUS AND METHOD

Priority: US20110546091P 20111012 US20110560835P 20111117 US20120651353 20121012 US20110568661P 20111209 US20120131684 20121116 US20120407452 20120228 US20120654585P 20120601 WO2012US65503 20121116

Family:

Publication number	Publication date	Application number	Application date
CA2854521 AA	20140424	CA20122854521	20121116
CA2854521 C	20170411	CA20122854521	20121116
US2014103062 AA	20140417	US20120651353	20121012
US2014312051 AA	20141023	US20120131684	20121116
US9292994 BB	20160322	US20120131684	20121116
US9373211 BB	20160621	US20120651353	20121012
WO13074915 A1	20130523	WO2012US65503	20121116

Probable Assignee: BLUEROCK VENTURES LLC

Assignee(s):(std)**:** BLUEROCK VENTURESK LLC ; HORGAN RYAN ; DINOIA FRANK ; RAY JAY ; QUATTROCELLI ERIC ; O BRIEN BOB ; ROSE III R EDWARD ; HUTCHINS BURLEIGH ; ROSE JR R EDWARD ; VERROCHI MICHAEL JAMES ; BLACK WARREN ; BLUEROCK VENTURES LLC

Assignee(s): BLUEROCK VENTURES LLC80–L WASHINGTON SQUARENORWELLMA02061US ; VERROCHI MICHAEL J ; ROSE R EDWARD ; ROSE R EDWARD III ; HANCOCK STEPHEN H

Inventor(s):(std)**:** BLACK WARREN ; DINOIA FRANK ; HANCOCK STEPHEN H ; HORGAN RYAN ; HUTCHINS BURLEIGH ; O BRIEN BOB ; QUATTROCELLI ERIC ; RAY JAY ; ROSE R EDWARD ; ROSE R EDWARD III ; ROSE III R EDWARD ; ROSE JR R EDWARD ; VERROCHI MICHAEL J ; VERROCHI MICHAEL JAMES

Inventor(s): VERROCHI MICHAEL JUS ; ROSE R ; ROSE R EDWARD IIIUS ; ROSE R EDWARDUS ; ROSE III R ; HANCOCK STEPHEN HUS

Agent(s): GASTLE AND ASSOCIATES; LORUSSO AND ASSOCIATES; LORUSSO MARK D

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65H1/00 B65H3/00 B65H3/44 G07F11/00 G07F11/28 G07F11/30 G07F11/34 G07F7/06 (Advanced/Invention)

CPC: G07F11/30 G07F7/0609 G07F11/28 G07F11/34

US class: 1/1 221/124

Classification Explorer

Cited documents: WO9204969 A1, WO08045247 A2, WO07100400 A2, US8851302 BB, US8827068 BB, US8757434 BB, US8757433 BB, US8469228 BB, US8387771 BB, US8113382 BA, US8083078 BB, US8028855 BB, US7975875 BB, US7913860 BB, US7757890 BB, US7513390 BB, US7303095 BB, US6834691 BB, US6637604 BA, US6598760 BA, US6286715 BA, US6223934 BA, US6206237 BA, US6173582 BA, US6152323 A, US5829630 A, US5462198 A, US5447407 A, US5356033 A, US5247798 A, US5199598 A, US5080256 A, US5046639 A, US5009329 A, US4998628 A, US4986441 A, US4784251 A, US4778042 A, US4712712 A, US4687119 A, US4285426 A, US3141571 A, US3062405 A, US3028045 A, US2996344 A, US2711241 A, US2562015 A, US2496304 A, US2260643 A, US2014312051 AA, US2014103062 AA, US2012222938 AA, US2011060693 AA, US2009140000 AA, US2009084810 AA, US2008308383 AA, US2008223871 AA, US2008121492 AA, US2008097770 AA, US2007012541 AA, US2006217836 AA, US2005189370 AA, US2004249502 AA, US2003146235 AA,

US2002043509 AA, US2001037838 AA, US1530288 A, US1004998 A, FR2721813 A1, FR2641887 A1, FR2599723 A1,

Forward Citations: US9390575, US9373211, US9292994, US2016324336, US2014312051, US2014103062, CN104916042,

Abstract:
Source: US2014103062A A combination vending/return apparatus and method. The apparatus includes a series of rows and columns for receiving, storing and dispensing unfilled and filled large−volume water−containing bottles from and to consumers. The apparatus includes a computer−operated vending keyboard for making bottle selections for purchase and returns, and to handle electronic payment and credit transactions. Also included is a method to vend large−volume water bottles and retrieve used and emptied large−volume water bottles.

0) US2002153123A – CONTINUOUS CASTING OF ALUMINUM

87) Family number: 28305951 (US2002153123A) © PatBase

Title: Continuous casting of aluminum

Priority: EP20030737080 20030613 US20010270262P 20010220 US20020078638 20020219 US20020078638P 20020219 US20020405333P 20020821 US20020405359P 20020821 US20020406453P 20020828 US20020406504P 20020828 US20020406505P 20020828 US20060549408 20061013 US20030461704 20030613 WO2002US05019 20020220 US20020406506P 20020828 US20020406507P 20020828 WO2003US18764 20030613 WO2002US05019 20030820

Family:

Publication number	Publication date	Application number	Application date
AT431208 E	20090515	AT20020706344T	20020220
AU2002240436 AA	20020904	AU20020240436	20020220
AU2003236522 AA	20040311	AU20030236522	20030613
DE60232337 D1	20090625	DE20026032337	20020220
DE60343943 D1	20130627	DE20036043943	20030613
EP1414602 A2	20040506	EP20020706344	20020220
EP1414602 B1	20090513	EP20020706344	20020220
EP1545812 A1	20050629	EP20030737080	20030613
EP1545812 A4	20060405	EP20030737080	20030613
EP1545812 B1	20130501	EP20030737080	20030613
ES2323767 T3	20090724	ES20020706344T	20020220
ES2423825 T3	20130924	ES20030737080T	20030613
JP2005504635 T2	20050217	JP20020565730T	20020220
JP2005536354 T2	20051202	JP20040530797T	20030613
JP4375966 B2	20091202	JP20020565730T	20020220
KR100861563 B1	20081002	KR20037010929	20020220
KR101129489 B1	20120328	KR20057002906	20030613
KR20040004533 A	20040113	KR20037010929	20030820
KR20050058402 A	20050616	KR20057002906	20030613
KR20110026026 A	20110314	KR20117004617	20110225
PT1414602 T	20090805	PT20020706344T	20020220
US2002153123 AA	20021024	US20020078638	20020219
US2003205357 AA	20031106	US20030461704	20030613
US2007137830 AA	20070621	US20060549408	20061013
US6672368 BB	20040106	US20020078638	20020219
US7125612 BB	20061024	US20030461704	20030613
US7503378 BB	20090317	US20060549408	20061013
WO02066181 A2	20020829	WO2002US05019	20020220
WO02066181 A3	20040219	WO2002US05019	20020220
WO04018124 A1	20040304	WO2003US18764	20030613

Probable Assignee: ALCOA INC

Assignee(s):(std)**:** ALCOA INC ; REYNOLDS FOIL INC ; UNAL ALI

Assignee(s): ALCOA INC PITTSBURGH ; ARCONIC INC

Inventor(s):(std)**:** UENAL ALI ; UNAL ALI ; ALI UNAL

Inventor(s): UENAL ALI ALCOA INC ALCOA TECHNICAL CENTER ; UENAL ALIALCOA INCALCOA TECHNICAL CENTER ALCOA CENTER

Agent(s): BOEHMERT AND BOEHMERT ANWALTSPARTNERSCHAFT MBB PATENTANWAELTE RECHTSANWAELTE; EBNER VON ESCHENBACH JENNIFER ET AL; BARTON

MATTHEW THOMAS; ARIAS JUAN; MARUYAMA TOSHIYUKI; INTELLECTUAL PROPERTY; GREENBERG TRAURIG LLP; HARRY A; RICHARDS JOHN

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B22D11/00 B22D11/06 B22D11/10 B22D11/112 B22D11/12 B22D11/20 B22D21/04 B22F3/18 B32B15/20 B32B5/16 C22F1/00 (Advanced/Invention); B22D11/06 B22D11/10 B22D21/04 (Advanced/Non–invention); B22D11/00 B22D11/06 B22D11/11 B22D11/12 B22D11/20 B22F3/00 B32B15/20 B32B5/16 C22F1/00 (Core/Invention)

International class (IPC 1–7): B22D11/00 B22D11/06 B22D11/10 B22D11/12 B22D11/124 B22D11/20 B22D25/00

CPC: B22D11/00 B22D11/114 Y10T428/12104 Y10T428/12486 Y10T428/12729 Y10T428/12799 Y10T428/12806 B22D11/0605 B22D11/001 B22D11/003 B22D11/0622

European class: B22D11/00 B22D11/00A B22D11/00A2 B22D11/06B B22D11/06E

US class: 148/522 148/523 148/538 164/428 164/428S 164/432 164/432S 164/433 164/436 164/459 164/479 164/480 164/481 164/481S 164/900 428/559 428/614 428/649 428/659 428/660

Classification Explorer

Cited documents: WO9714520 A1, WO9502708 A1, US7125612 BB, US6672368 BB, US6344096 BA, US6280543 BA, US6193818 BA, US6120621 A, US6044896 A, US5983980 A, US5934359 A, US5772802 A, US5772799 A, US5564491 A, US5518064 A, US5515908 A, US5514228 A, US5496423 A, US5482107 A, US5470405 A, US5370171 A, US5356495 A, US4915158 A, US4828012 A, US4823860 A, US4751958 A, US4341261 A, US4282044 A, US4260419 A, US4238248 A, US4054173 A, US4053173 A, US4002197 A, US2693012 A, JP7148557 A2, JP60027450 A2, JP1202344 A2, JP1202334, EP0380698 A1, DE2443068 A1,

Forward Citations: WO17007458, WO15175403, WO14130088, WO13172912, WO13172912, WO13172910, WO13172910, WO13133978, WO13133976, WO13133960, WO10041791, WO08128061, WO08128055, WO07053808, USRE45414, US9587298, US9528174, US9359660, US9249484, US9194028, US8999079, US8956472, US8757243, US8697248, US8403027, US8381796, US8356655, US8122937, US7846554, US7661458, US7503378, US7503377, US7096922, US7089993, US6880617, US2014367000, US2014000768, US2013334091, US2011130297, US2010119407, US2009145567, US2008254309, US2008251230, US2007137830, US2007095499, US2006225862, US2003230394, KR101511632, JP2010524689, JP2010523338, EP2822717, EP2822716, EP2264198, EP2142324, EP2142324, EP2049287, EP1468761, EA025066, DE102012209568, DE102012209568, DE102012209568, CN105121690, CN104321451, CN104284745, CN104271289, AU2013204114, AU2013203144, AU2013202789, AU2007283438,

Abstract:
Source: US2002153123A A method of continuous casting aluminum alloys between a pair of rolls. Molten aluminum alloy is delivered to a roll bite between the rolls and passes into the roll nip in a semi–molten state. A solid strip of cast aluminum alloy exits the nip at speeds of about 25 to about 400 feet per minute. Thin gauge (0.07–0.25 inch) strip may be produced at rates of up to 2000 pounds per hour per inch of cast strip width.

0) US2002125249A – AN OPEN ENDED CONTAINER CLOSURE INCLUDING A FLE...

88) Family number: 30116314 (US2002125249A) © PatBase

Title: AN OPEN ENDED CONTAINER CLOSURE INCLUDING A FLEXIBLE MEMBRANE AND A RIGID CAP

Priority: GB19970011462 19970604 US20000445043 20000320 US20070867135 20071004 WO1998IB00825 19980528

Family:

Publication number	Publication date	Application number	Application date
AT237522 E	20030515	AT19980921675T	19980528
AU199874452 A1	19981221	AU19980074452	19980528
AU736017 B2	20010726	AU19980074452	19980528
BRPI9809898 A	20000801	BR1998PI09898	19980528
CA2292607 AA	19991130	CA19982292607	19980528
CA2292607 C	20041026	CA19982292607	19980528
DE69813548 D1	20030522	DE19986013548	19980528
DE69813548 T2	20040205	DE19986013548T	19980528
DK0986504 T3	20030519	DK19980921675T	19980528
EP0986504 A1	20000322	EP19980921675	19980528
EP0986504 B1	20030416	EP19980921675	19980528
ES2200339 T3	20040301	ES19980921675T	19980528
GB2325924 A1	19981209	GB19970011462	19970604
GB2325924 B2	20010418	GB19970011462	19970604
GB9711462 A0	19970730	GB19970011462	19970604
JP2002502343 T2	20020122	JP19990501931T	19980528
PT986504 T	20030930	PT19980921675T	19980528
US2002125249 AA	20020912	US20000445043	20000320
US2008017646 AA	20080124	US20070867135	20071004
US8348079 BB	20130108	US20000445043	20000320
WO9855374 A1	19981210	WO1998IB00825	19980528

Probable Assignee: LAWSON MARDON SUTTON LTD

Assignee(s):(std)**:** BAIRD SMITH IAN ; BAIRD SMITH IAN G ; LAWSON MARDON SUTTON LTD ; GEISLER REINHART ; HAMMON WERNER ; LAWSON MARDON CAN ; ALUSUISSE TECH AND MAN LTD ; ALUSUISSE TECHNOLOGY AND MAN LTD ; LAWSON MARDON M I LTD ; ZIEGLER ANDREAS

Assignee(s): LAWSON MARDON MI LIMITED ; LAWSON MARDON SUTTON LTD SUTTON IN ASHFIELD ; ALUSUISSE TECHNOLOGY AND MANAGEMENT LTD ; LAWSON MARDON MI LTD ; LAWSON MARDON SUTTON LIMITED

Inventor(s):(std)**:** ANDREAS ZIEGLER ; BAIRD SMITH IAN ; BAIRD SMITH IAN GEORGE ; GEISLER REINHART ; HAMMON WERNER ; IAN BAIRD SMITH ; REINHART GEISLER ; WERNER HAMMON ; ZIEGLER ANDREAS ; BAIRD SMITH IAN G

Inventor(s): IAN GEORGE BAIRD SMITH

Agent(s): FB RICE; BORDEN LADNER GERVAIS LLP; OPPENHEIMER WOLFF AND DONNELLY LLP; BARBARA A

Designated states: AT AU BE BR CA CH CY DE DK ES FI FR GB GR IE IT JP LI LU MC NL PT SE US

International class (IPC 8–9): B65D41/00 B65D41/06 B65D43/00 B65D43/02 B65D51/20 B65D53/00 (Advanced/Invention); B65D43/00 B65D43/02 B65D51/18 (Core/Invention)

International class (IPC 1–7): B65D41/04 B65D51/20

CPC: B65D43/0231 B65D51/20 B65D2251/0018 B65D2251/0093 B65D2543/00092 B65D2543/00277 B65D2543/00527 B65D2543/00537 B65D2543/00972

European class: B65D43/02S7E B65D51/20 L65D251/00Y2F L65D251/00Y6M L65D543/00Y1F2C L65D543/00Y1M4 L65D543/00Y20B1 L65D543/00Y8D1N L65D543/00Y8D3

US class: 220/254.1 220/258.1 220/258.100P 220/293 220/293S 220/304 220/304S 220/359.1 220/361 426/113 426/131 426/401 426/407

Classification Explorer

Cited documents: WO9609968 A1, US6823651 BB, US6477823 BA, US5809750 A, US5664621 A, US5188253 A, US4998638 A, US4896782 A, US4856674 A, US4697719 A, US4683016 A, US4640428 A, US4557414 A, US4531649 A, US4501371 A, US4490597 A, US4452842 A, US4328905 A, US4295904 A, US4044941 A, US3973719 A, US3967746 A, US3892351 A, US3885696 A, US3833142 A, US3815314 A, US3805993 A, US365064 A, US3396899 A, US3122990 A, US3108005 A, US3099114 A, US3079057 A, US2745755 A, US2387439 A, US2257715 A, US2006096982 AA, US2003051445 AA, US2002062626 AA, US1862449 A, US1630687 A, US1128948 A, JP6219464 A2, JP62122962 A2, JP60219494 A2, JP2231064 A2, GB374702 A, GB2123392 A1, GB2072131 A1, GB194670 A, GB1569106 A, FR2604976 A1, DE840078 A, DE3919835 A1, DE1176014 B, CH684077,

Forward Citations: WO06131121, WO06131121, WO06000773, WO06000532, WO05032964, WO05032964, USD630093, US9497988, US9242768, US9150328, US9102448, US8522991, US8490804, US8468782, US8453856, US8413830, US8376172, US7830263, US2014117046, US2011210122, US2011095030, US2011017736, US2010320168, US2010264145, US2010170898, US2009212054, US2009173007, US2009134160, US2008308554, US2008308519, US2008302752, US2008283484, US2008237236, US2008216489, US2008190880, US2007090110, US2006124646, EP2500292, EP1631495, EP1190958, EP1190958,

Abstract:
Source: US2002125249A The invention concerns a closure for a cylindrical can (10) The closure includes a flexible member (11) of the easy−open type secured across the open end of the can (10). A rigid, screw cap (22) is screwed over the thus sealed end of the can. An annular, resilient member (24) depending downwardly from the underside of the end wall of the cap (22), engages the membrane (11) in the vicinity of the end flange (18) of the can body (10) thereby strengthening the seal between the membrane (11) and the flange (18). This advantageously permits cooking of the contents of the can with the flexible membrane (11) in situ, thereby giving rise to a can having an easy−open end, the contents of which can are cooked and sterilized using conventional processing lines.

0) US3672535A – RING TAB FOR EASY–OPEN CAN

89) Family number: 1010803 (US3672535A) © PatBase

Title:	RING TAB FOR EASY–OPEN CAN
Priority:	US19700099603 19701218

Family:

Publication number	Publication date	Application number	Application date
US3672535 A	19720627	US19700099603	19701218

Probable Assignee:	FRAZE ERMAL C
Assignee(s):(std):	FRAZE ERMAL C
Assignee(s):	ERMAL C FRAZE
Inventor(s):(std):	MCGUIRE J B
Inventor(s):	J B MCGUIRE ; JB MCGUIRE
International class (IPC 8–9):	B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)
International class (IPC 1–7):	B65D17/24 B65D17/34
CPC:	B65D17/165
European class:	B65D17/16B2
US class:	220/273 220/54
Classification Explorer	
Cited documents:	US3432067, US3422983,
Forward Citations:	WO15134913, US3851787,

Abstract:
Source: US3672535A A tab for use with an easy–open can end in which the attachment portion of the tab is formed integral with the inner tab bead and is passed below the outer tab bead and extends to a position beyond the outer periphery of the outer bead for attachment to a tear strip by suitable means such as an integral rivet. The attachment portion is sufficiently long to prevent a sharp bending of the tear strip in the area immediately adjacent the rivet.

0) US2003178397A – LASER ENGRAVED OPENING TAB

90) Family number: 14813649 (US2003178397A) © PatBase

Title: LASER ENGRAVED OPENING TAB

Priority: SE19980001489 19980428 US19990412362 19991005 US20000482620 20000114 US20000482616 20000114 US20030395102 20030325 WO1999SE00692 19990428

Family:

Publication number	Publication date	Application number	Application date
SE9801489 A0	19980428	SE19980001489	19980428
US2003178397 AA	20030925	US20030395102	20030325
US6476349 BA	20021105	US20000482620	20000114
US6479787 BA	20021112	US20000482616	20000114
US6926487 BA	20050809	US19990412362	19991005

Probable Assignee: REXAM AB

Assignee(s):(std)**:** PLM AB ; REXAM AB

Assignee(s): REXAM BOX AB ; PLM DJAKNEGATAN AB

Inventor(s):(std)**:** JENDICK MANFRED

Inventor(s): MANFRED JENDICK

Agent(s): NIXON AND VANDERHYE PC

International class (IPC 8–9)**:** B21C47/34 B21C51/00 B23K26/08 (Advanced/Invention); B21C47/34 B21C51/00 B23K26/08 (Core/Invention); B65D (Subclass/Invention)

International class (IPC 1–7)**:** B21D51/44 B23K26/00 B23K9/12 B65H23/16

CPC: B21C47/34 B21C51/005 B23K26/0846 B23K2201/007

European class: B21C47/34 B21C51/00B B23K26/08E2B L23K201/00R

US class: 219/121.68 219/121.680S 219/121.69 219/121.690P 219/121.75 219/121.82 219/79 242/615.1 413/25 413/8

Classification Explorer

Cited documents: WO9909853 A2, WO9853949 A1, WO9747397, WO9711288 A1, WO9504342 A2, WO9308541, WO9304943 A1, WO0168460 A2, WO0003832 A1, USRE35446 E, USD289017 S1, USD268250 S1, USD261364 S1, USD210870 S1, US6872913 BA, US6501046 BA, US6498318 BA, US6489985 BA, US6479787 BA, US6476349 BA, US6433302 BA, US6373876 BA, US6326586 BA, US6202880 BA, US6163010 A, US6160835 A, US6140606 A, US6111907 A, US6105806 A, US6080958 A, US6053349 A, US6002098 A, US5967726 A, US5906760 A, US5863017 A, US5855969 A, US5854805 A, US5837962 A, US5817243 A, US5813782 A, US5799815 A, US5782024 A, US5751436 A, US5719372 A, US5718457 A, US5698119 A, US5660747 A, US5660516 A, US5653900 A, US5649363 A, US5635900 A, US5612525 A, US5609778 A, US5609043 A, US5593606 A, US5578120 A, US5570384 A, US5552574 A, US5523125 A, US5511920 A, US5492077 A, US5465780 A, US5416951 A, US5401979 A, US5359766 A, US5359176 A, US5331443 A, US5329090 A, US5315108 A, US5262613 A, US5248878 A, US5235454 A, US5215864 A, US5206496 A, US5202199 A, US5191695 A, US5170279 A, US5125780 A, US5112695 A, US4998641 A, US4970600 A, US4965829 A, US4940880 A, US4922077 A, US4910739 A, US4880137 A, US4765532 A, US4675500 A, US4635545 A, US4578329 A, US4564739 A, US4530631 A, US4517638 A, US4517436 A, US4485935 A, US4476781 A, US4465204 A, US4459910 A, US4431124 A, US4405852 A, US4393411 A, US4380129 A, US4375025 A, US4363179 A, US4331256 A, US4323755 A, US4323317 A, US4322016 A, US4304981 A, US4219127 A, US4203240 A, US4184607 A, US4024545 A, US3958354 A, US3898417 A, US3866398 A, US3863823 A, US3858122 A, US3854647 A, US3825151 A, US3822496 A, US3796344 A, US3704614 A, US3701880 A, US3692223 A, US3627858 A, US3626141 A, US3549733 A, US3471641 A, US3281024 A, US3182994 A, US3087665 A, US3001787 A, US2648278 A, US2641998 A, US2003015507 AA, JP9208095, JP9192870, JP8175006, JP8053121 A2, JP77053099, JP7053099 A2, JP63252746, JP63020591, JP61086305 A2, JP58187091 A2, JP5178346, JP2020684, JP11216589, JP11058050, JP11006086, JP10113786, GB2320008 A1,

GB2185613 A1, GB1124958, FR2750396, FR2649628, EP0618037 A1, EP0564639 A1, EP0482776 A1, EP0377915 A2, EP0289022 A2, EP0208175 A2, EP0085484 A1, EP0040929 A1, EP0040922 A1, DE8900453 U, DE8900453 A1, DE4435531 A1, DE4405203 A1, DE4339321 A1, DE4338774 A1, DE4322252 A1, DE4143339 A1, DE4106151 A1, DE4103746, DE3822097 A1, DE29816109 U1, DE29816109, DE2981610, DE2052512 A1, DE19840934 A1, DE19701547, DE19639619 A1, DE19607621 A1, CA2232871 AA, CA2168435 AA, AU8179494 A1,

Forward Citations: WO16146875, WO15199046, WO14028360, WO14028360, WO13158771, WO08070979, WO07044798, USD625184, US9637267, US9592569, US9278776, US9187221, US9186924, US9007413, US8844747, US8146768, US8008598, US7903336, US6926487, US6926456, US6872913, US6808351, US6686694, US2013319066, US2011226636, US2011084051, US2010193519, US2010119784, US2010084382, US2007240325, US2007056932, US2006140746, US2006012821, US2005045637, US2004058238, GB2444018, GB2444018, DE112006002720, CN104703746,

Abstract:
Source: US2003178397A In a method of manufacturing articles to be included in cans, a metal strip (1) is fed to an article forming unit (11), in which it is punched and stamped to form the articles. Before the article forming operations, the strip (1) is provided with laser engravings on one of its upper and lower surfaces, or on both these surfaces. The laser engravings form indicative marks on the articles. In addition to the article forming unit (11), an apparatus for manufacturing such articles has a metal strip supply (8), means (13) for feeding the strip (1) and a laser unit (9) for providing the indicative laser engraved marks on the articles.

0) US5816428A – EASY–OPEN CAN END AND SPOUT

91) Family number: 20568259 (US5816428A) © PatBase

Title: Easy–open can end and spout

Priority: US19940313872 19940928 US19960661155 19960610 WO1997US09843 19970610

Family:

Publication number	Publication date	Application number	Application date
AR007544 AA	19991110	AR1997P102522	19970610
AU199733796 A1	19980107	AU19970033796	19970610
US5816428 A	19981006	US19960661155	19960610
WO9747525 A1	19971218	WO1997US09843	19970610
ZA9705123 A	19971231	ZA19970005123	19970610

Probable Assignee: COCA COLA CO

Assignee(s):(std)**:** COCA COLA CO ; THE COCA COLA COMPANY

Inventor(s):(std)**:** GEORGE PLESTER ; PLESTER GEORGE

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CN CU CZ DE DK EE ES FI FR GB GE GH GR HU IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG UZ VN

International class (IPC 8–9): B65D1/20 B65D17/28 B65D25/44 B65D47/06 B65D8/02 (Advanced/Invention); B65D17/28 (Advanced/Non–invention)

International class (IPC 1–7): B65D17/00 B65D17/28 B65D25/44 B65D47/06 B65D77/28

CPC: B65D17/165 B65D25/44 B65D47/063 B65D2517/0016 B65D2517/0049 B65D2517/0062

European class: B65D17/16B2 B65D25/44 B65D47/06A1 L65D517/00Y2D L65D517/00Y6A L65D517/00Y7A1A

US class: 220/257 220/257.2 220/270 220/281 220/717 222/527

Classification Explorer

Cited documents: WO9603331 A1, WO8601488 A1, US4632288 A, US4632282 A, US4548332 A, US4513870 A, US4442949 A, US4403709 A, US3135441 A, US3093273 A, US3075676 A, US2895654 A, US2804242 A, US2594467 A, US2258145 A, GB1202922 A, FR1228265 A, EP0744355 A1, EP0409759 A1,

Forward Citations: WO9943243, WO16007101, WO15089206, WO11148012, WO09149530, WO09149530, WO09106124, WO09051557, WO06119599, WO04078597, WO0105672, USD747649, USD747199, USD452443, US9637269, US9334082, US9272819, US8985371, US8857644, US8844761, US7152766, US6454094, US5979697, US2010320207, US2010224628, US2010126992, US2008156820, US2007278255, US2006261069, US2004129713, ITBO20100739, FR2816920, FR2806390, EP1862395, EP1686066, EP1136387, EP0945361, DE102005004759, CN103625762,

Abstract:
Source: US5816428A To provide a can–lid with pop–out–spout, a folded, plastic spout is secured on the underside of a metal can–lid, which is conventionally roll–seamed onto the can–body. This is achieved either by gluing, or by plastic–coating the underside of the lid and heat–sealing the spout to the lid, or by incorporating the tips of the spout's flange in the roll–seamed joint of the can–lid, or other appropriate means. When the can is opened, the spout is released and either unfolds automatically due to the beverage's pressure (in case of carbonated beverages), or can be pulled out by the user. The spout is provided wither with a screw–closure, or with a twist–off, flick–open closure. In one version, the spout is completely covered by the can–lid, which is provided by an opening feature which enables an opening large enough for the spout to pass out. In a further version, the can–lid has a pre–cut aperture, behind which the closure on the spout is locked until the user opens by twisting the closure to free it from aperture. Pilfer–evidence is provided by the can–lid itself, where this has no pre–cut aperture, or by making the handles of the closure pilfer–evident when bent out, or by applying a label across the pre–cut aperture.

0) US3877604A – EASY OPEN ECOLOGY END

92) Family number: 1133655 (US3877604A) © PatBase

Title: Easy open ecology end

Priority: US19730413812 19731108

Family:

Publication number	Publication date	Application number	Application date
US3877604 A	19750415	US19730413812	19731108

Probable Assignee: DAYTON RELIABLE TOOL AND MFG CO

Assignee(s):(std)**:** DAYTON RELIABLE TOOL AND MFG CO

Assignee(s): FRAZE MARTHA L

Inventor(s):(std)**:** BROWN OMAR L

International class (IPC 8–9): B65D17/00 B65D43/02 (Advanced/Invention); B65D17/00 B65D43/02 (Core/Invention)

International class (IPC 1–7): B65D17/00 B65D17/06 B65D43/02

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/267 220/268 220/281 220/284 222/541.2 222/541.6 222/81 D9/450

Classification Explorer

Cited documents: US3807597 A, US3383007 A, US3379333 A,

Forward Citations: WO9724264, WO9724264, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD691039, USD671834, USD582274, USD582273, USD533452, USD532691, USD532298, USD530610, USD522860, USD513452, USD509426, USD486734, US9637269, US9446879, US9272819, US9233784, US8985371, US8720717, US8567158, US7950542, US7051896, US6575684, US4709830, US4706835, US4696410, US4489864, US4364614, US3994413, US3938693, US2014042164, US2010206875, US2006163253, US2004065664,

Abstract:
Source: US3877604A An easy open end for containers includes a removable panel forming an opening in the container end wall and being defined by a score line. The container is opened, i.e. the score line ruptured, by applying a downward force on the panel to cause a rupture of the score line. Where the score line is continuous, the severed panel drops into the container, and where discontinuous the panel may be folded back to the underside of the end wall. Rupture of the score line is achieved by a rotatable force applying tab device which cooperates with the end wall and the panel to exert a downward force in response to rotational movement of the force applying tab. The rotating force applying tab is secured to a generally annular fold provided in the end wall and encircling the panel. The underside of the tab includes spaced cam fingers so cooperating with spaced cam surfaces formed in the panel that in one position of the tab the cam fingers are positioned out of engagement with the cam surfaces, but as the tab is rotated, the cam fingers engage the cam surfaces to apply a downward force resulting in rupture of the score line. Various forms of the invention are illustrated and described.

0) US2003236453A – MULTI–CHANNEL CATHETER TIP

93) Family number: 30123215 (US2003236453A) © PatBase

Title: MULTI–CHANNEL CATHETER TIP

Priority: EP20030761182 20030619 EP20090175576 20030619 US20020175479 20020619 US20100715945 20100302 WO2003US19484 20030619

Family:

Publication number	Publication date	Application number	Application date
AT447995 E	20091115	AT20030761182T	20030619
AU2003243686 AA	20040106	AU20030243686	20030619
DE60330005 D1	20091224	DE20036030005	20030619
DE60342394 D1	20121213	DE20036042394	20030619
DK1513577 T3	20100315	DK20030761182T	20030619
EP1513577 A1	20050316	EP20030761182	20030619
EP1513577 B1	20091111	EP20030761182	20030619
EP2174686 A1	20100414	EP20090175576	20030619
EP2174686 B1	20121017	EP20090175576	20030619
EP2308541 A1	20110413	EP20100185909	20030619
JP2005529715 T2	20051006	JP20040516017T	20030619
JP4965803 B2	20120704	JP20040516017T	20030619
US2003236453 AA	20031225	US20020175479	20020619
US2010217131 AA	20100826	US20100715945	20100302
US7672713 BB	20100302	US20020175479	20020619
US8280495 BB	20121002	US20100715945	20100302
WO04000402 A1	20031231	WO2003US19484	20030619

Probable Assignee: INFRAREDX INC

Assignee(s):(std)**:** FURNISH SIMON ; INFRAREDX INC

Assignee(s): FLAHERTY PETER A ; MARTINELLI ALFRED ; MCGARTY JOHN J ; OSTERWEIS REVOCABLE TRUST U A DATED ; HOLLAND WILLIAM ; KETTLE FAMILY LTD ; PAUL F MULLER LIVING TRUST DATED SEPTEMBER ; GLOUTNEY PIERRE ; MARQUARD WILLIAM A ; KETTLE FAMILY PARTNERSHIP LTD ; OSTERWEIS REVOCABLE TRUST U A DATED 9 13 93 ; GENERAL ELECTRIC CAPITAL CORP ; NIPRO CORP ; INFRAREDX INC CAMBRIDGE ; ROSSTON FAMILY REVOCABLE TRUST U A DATED ; SUBRAMANIAM SOMU ; PAULI DAVID C ; SILVERSTEIN MARK AND HEIDI ; WILHELM LYNN ; WOOD W DAVID ; PRIEST WILLIAM W ; PAUL F MULLER LIVING TRUST DATED SEPTEMBER 25 1997 ; ROSSTON FAMILY REVOCABLE TRUST U A DATED 9 22 94 ; 562 MISSION STREET LLC ; BUTLER JAMES C ; DATER ELIZABETH ; DB SECURITIES INC ; DB SECURITIES INC CUST FBO ALAN J ZAKON ; DENNING RICHARD B ; DEWEY JR ; DEWEY JR ROBERT M

Inventor(s):(std)**:** FURNISH SIMON

Inventor(s): FURNISH SIMON NEW YORK ; SIMON FURNISH

Agent(s): BARDEHLE PAGENBERG PARTNERSCHAFT MBB PATENTANWAELTE RECHTSANWAELTE; HUTCHINSON GLENN STANLEY; BENSON CHRISTOPHER; ROTHWELL FIGG ERNST AND MANBECK PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SC SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A61B1/00 A61B18/22 A61B5/00 A61B6/00 A61B6/08 A61M25/00 A61M25/14 G02B23/24 G02B23/26 (Advanced/Invention); A61B1/00 A61B5/00 A61B6/08 A61M25/00 A61M25/14 G02B23/24 G02B23/26 (Core/Invention)

A61B1/00 A61B18/22 A61B5/00 A61M25/00 G02B23/24 G02B23/26

International class (IPC 1–7):

CPC: A61B1/00183 A61B5/0084 A61B5/02007 A61M25/0069

European class: A61B1/00S4H A61B5/00P12B A61B5/02D A61M25/00T1 A61M25/00T10A

US class: 600/341 600/341P 600/407 600/473 600/476 600/477 600/478 600/478P

Classification Explorer

Cited documents: WO02096478 A2, WO0111409 A2, US7486985 BB, US7426410 BB, US7376455 BB, US7050692 BB, US6701181 BB, US6654630 BB, US6589233 BA, US6343227 BA, US6327493 BA, US6263224 BA, US6144791 A, US6134003 A, US6091984 A, US6055451 A, US5995875 A, US5993467 A, US5953477 A, US5901261 A, US5878178 A, US5713364 A, US5681280 A, US5507294 A, US5496309 A, US5427107 A, US5354294 A, US5353790 A, US5343543 A, US5318024 A, US5292320 A, US5290275 A, US5253312 A, US5242438 A, US5197470 A, US5195968 A, US5190538 A, US5169395 A, US5014204 A, US4921326 A, US4896941 A, US4740047 A, US4570638 A, US3543744 A, US2007135793 AA, US2007015998 AA, US2004122360 AA, US2003028114 AA, US2002183623 AA, JP64054015 U1, JP62016914 U1, JP53008088 U1, JP52140286 U1, JP2008401 U1, JP2003528684 T2, JP2002112954 A2, JP2001046394 A2, JP2000329534 A2, JP2000070270 A2, JP11253562 A2, JP11253562, JP1032834 A2, JP10262974 A2, FR2681522 A1, EP1075821 A2, EP0947221 A2, DEEP0947221, DE947221 A,

Forward Citations: US8958867, US8917965, US8029766, US7996069, US7980745, US2013129297, US2009187108, US2009054957, US2009043211, US2009012407, US2007270717, US2006041199, US2005165315, JP2012223206, JP2011529750, EP1765172,

Abstract:
Source: US2003236453A A tip assembly for a catheter includes a housing having a recess that receives an optical bench. The optical bench accommodates adjacent fibers, one of which is in optical communication with a first beam re−director. The first beam re−director is oriented to cause a beam incident thereon to travel in a direction away from the optical bench. An engaging structure coupled to the optical bench provides torque coupling between the housing and an end of a torque cable extending axially along the catheter.

0) US3606075A – CONTAINER OPENING DEVICE

94) Family number: 458098 (US3606075A) © PatBase

Title: CONTAINER OPENING DEVICE

Priority: US19700000730 19700105

Family:

Publication number	Publication date	Application number	Application date
DE2100243 A1	19710722	DE19712100243	19710105
DE2100243 B2	19730201	DE19712100243	19710105
DE2100243 C3	19730816	DE19712100243	19710105
DK127282 B	19731015	DK19700006629	19701230
FR2075934 A1	19711015	FR19710000147	19710105
FR2075934 B1	19740906	FR19710000147	19710105
GB1295890 A	19721108		19701230
JP52033554 B4	19770829	JP19710000085	19710105
SE364484 B	19740225	SE19700017723	19701230
US3606075 A	19710920	US19700000730	19700105

Probable Assignee: ALUMINUM CO OF AMERICA

Assignee(s):(std)**:** ALUMINUM CO OF AMERICA ; ALUMINIUM CO

Assignee(s): ALUMINIUM CO US ; ALUMINUM COMPANY OF AMERICA ; ALUMINUM CY OF AMERICA ; ALUMINUM CY OF MERICA US

Inventor(s):(std)**:** DUNN L ; DUNN LLOYD GRAHAM

Inventor(s): LLOYD GRAHAM DUNN ; DUNN L US

International class (IPC 8–9)**:** B65D17/00 B65D17/34 B65D41/42 B65D47/00 (Advanced/Invention); B65D17/00 B65D17/28 B65D41/32 B65D47/00 (Core/Invention)

International class (IPC 1–7)**:** B65D17/00 B65D17/16 B65D17/24 B65D17/34 B65D41/42 B65D47/00

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/273 220/54

Classification Explorer

Cited documents: US3411662 A, US3294275 A,

Forward Citations: WO9901351, WO9901351, WO9630270, US9162794, US5879120, US3867738, US2014008367, EP1318077, EP1306310, EP0993408, EP0815022,

Abstract:
Source: US3606075A ABSTRACT OF THE DISCLOSURE A tab for attachment to a tear−out section in a container wall, which tab has a cut line therein around the side of attachment aperture in the tab adjacent the handle portion of the tab and terminating on a line through the center of the attachment aperture in the tab to form a hinge line through the aperture whereby the handle portion of the tab can be rotated upwardly about the hinge line to form a rigid lever which can be manipu−lated to initiate rupture of the score line adjacent the attachment of the tab to the panel, and then be pulled to complete severance of the tear−out panel. B

0) US3984025A – TAB ANTI–ROTATION AND HOLD DOWN DEVICE

95) Family number: 1327877 (US3984025A) © PatBase

Title: Tab anti–rotation and hold down device

Priority: US19740524682 19741118

Family:

Publication number	Publication date	Application number	Application date
CA1018089 A1	19770927	CA19750225789	19750429
CH588385 A	19770531	CH19750004861	19750416
FR2333711 A1	19770701	FR19750031641	19751016
FR2333711 B1	19811120	FR19750031641	19751016
US3984025 A	19761005	US19740524682	19741118
ZA7501932 A	19761027	ZA19750001932	19750326

Probable Assignee: CONTINENTAL CAN CO

Assignee(s):(std)**:** CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC ; CONTINENTAL CAN CY INC ; KHOURY NICK S

Inventor(s):(std)**:** KHOURY N ; KHOURY NICK S

International class (IPC 8–9)**:** B65D41/32 (Advanced/Invention); B65D41/32 (Core/Invention); B65D (Subclass/Invention)

International class (IPC 1–7)**:** B65D17/16 B65D17/24 B65D41/32

CPC: B65D17/163

European class: B65D17/16B1

US class: 220/270

Classification Explorer

Cited documents: US3869063 A, US3724709 A,

Forward Citations: WO05113352, WO03010054, US8833589, US8360262, US8146766, US8127961, US8123064, US8056750, US7909196, US2009120937, US2008277397, US2008006632, US2008000904, US2005252917, AU2005245413,

Abstract:
Source: US3984025A An improved pull tab mounting arrangement for an easy open end closure member, characterized by the provision of improved pull tab positioning means for maintaining the pull tab in a desired orientation relative to the panel–defining score line and minimizing tab protrusion from the end closure member. A pierced hole forming a protrusion with a jagged edge is incorporated in the tab nose portion between the free extremity of the tab and the rivet means that secures the tab to the end panel member. The jagged protruding edge of the protrusion is driven into the end panel member during the staking operation, thereby providing an anti–rotation interlock between the tab and the end panel which prevents rotation of the tab nose relative to the score line. The protrusion further serves to raise the nose portion of the tab relative to the end panel thereby biasing the tab against the end panel upon staking of the rivet which forces the finger grip portion of the tab into close contact with the end panel.

0) US2002117499A – BEVERAGE CAN HAVING A COVERING FOR A DISPENSING...

96) Family number: 28220079 (US2002117499A) © PatBase

Title: Beverage can having a covering for a dispensing opening

Priority: KR20010005073U 20010226

Family:

Publication number	Publication date	Application number	Application date
US2002117499 AA	20020829	US20010028021	20011228

Probable Assignee: HUR KYUNG D

Assignee(s):(std)**:** HUR KYUNG D

Inventor(s):(std)**:** HUR KYUNG D

International class (IPC 8–9)**:** B65D43/18 B65D51/20 (Advanced/Invention); B65D43/14 B65D51/18 (Core/Invention)

International class (IPC 1–7)**:** B65D43/18 B65D51/20

CPC: B65D17/165 B65D2517/0014 B65D2517/0025

European class: B65D17/16B2 L65D517/00Y2C L65D517/00Y3B

US class: 220/254.4 220/258.3 220/821

Classification Explorer

Forward Citations: US8875926, US8622238, US2013240535,

Abstract:
Source: US2002117499A A beverage can is provided with an opening tab rotatably attached to a rotational shaft formed on a can end, and a covering rotatably attached to the rotational shaft, being positioned beneath the opening tab, and adapted to be rotated together with the opening tab, the covering has a size larger than that of a dispensing opening through which contents of the beverage can are dispensed and an upwardly convex shape allowing the covering to be closely contacted to the can end during its rotational movement.

0) US4247014A – SELF–STORING PERMANENTLY ATTACHED OPENING MEANS...

97) Family number: 8065600 (US4247014A) © PatBase

Title: Self–storing permanently attached opening means

Priority: US19780965315 19781201 US19790101882 19791210

Family:

Publication number	Publication date	Application number	Application date
US4247014 A	19810127	US19790101882	19791210

Probable Assignee: WALZ KARL

Assignee(s):(std)**:** WALZ KARL

Inventor(s):(std)**:** WALZ KARL

International class (IPC 8–9)**:** B65D41/32 (Advanced/Invention); B65D41/32 (Core/Invention)

International class (IPC 1–7)**:** B65D41/32

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/269

Classification Explorer

Cited documents: US3923193 A, US3860143 A, US3744667 A,

Forward Citations: WO9838100, US9511411, US7703624, US7165696, US6450359, US6405889, US6234336, US6026971, US5813561, US5248053, US5065882, US4915290, US4480763, US4363419, US2010126994, US2008173646, US2007039961,

Abstract:
Source: US4247014A This invention relates to self–contained self–storing opening means for hollow containers such as thin–walled metal beverage cans customarily provided with attached opening means therefor arranged to be or able to be pulled loose from the can and discarded hazardously underfoot and typically featuring an opening therethrough with a hazardous raw metal edge. This invention provides a can cover including a flap portion and a pull tab, respectively having first and second mating portions mutually fixedly interfitted and permanently interconnected, located either fixedly in the cover or together rotatable with the flap portion inwardly of the can as it is opened, the pull tab having an annular end portion encircling the opening formed by breaking open the flap portion and covering the raw edge of this opening in its final protective position. Accordingly, the present invention is useful on beverage cans and other hollow containers needing non–hazardous permanently attached opening means.

0) US5711447A – EASY–OPEN RESEALABLE CAN–END AND CLOSURE THEREF...

98) Family number: 15323481 (US5711447A) © PatBase

Title: EASY–OPEN RESEALABLE CAN–END AND CLOSURE THEREFOR

Priority: US19940313886 19940928 US19960695366 19960809 WO1995US12230 19950926

Family:

Publication number	Publication date	Application number	Application date
AU199536836 A1	19960419	AU19950036836	19950926
TW298945 Y	19970221	TW19950211542U	19951016
US5711447 A	19980127	US19960695366	19960809
WO9609968 A1	19960404	WO1995US12230	19950926
ZA9508127 A	19970327	ZA19950008127	19950927

Probable Assignee: COCA COLA CO

Assignee(s):(std): COCA COLA CO

Assignee(s): COCA COLA COMP ; COCA COLA COMP US ; COCA COLA COMPANY THE ; THE COCA COLA COMPANY

Inventor(s):(std): GEORGE PLESTER ; PLESTER GEORGE

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IS IT JP KE KG KR KZ LK LR LT LU LV MC MD MG ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TT UA UG UZ VN

International class (IPC 8–9): B65D41/04 B65D41/32 B65D41/34 B65D43/02 B65D51/20 B65D51/28 (Advanced/Invention); B65D41/04 B65D41/34 B65D43/02 B65D51/18 B65D51/24 (Core/Invention); B65D41/32 (Core/Non–invention)

International class (IPC 1–7): B65D B65D41/32 B65D41/34 B65D43/08 B65D51/18 B65D51/28

CPC: Y10S220/906 B65D41/3409 B65D41/0492 B65D41/3404 B65D43/0283 B65D51/20 B65D51/28 B65D2231/02 B65D2251/0018 B65D2251/0071 B65D2517/0041 B65D2543/00092 B65D2543/00231 B65D2543/00277 B65D2543/00296 B65D2543/00314 B65D2543/00509 B65D2543/00537 B65D2543/00555

European class: B65D41/04G B65D41/34A B65D41/34A1 B65D43/02T7E B65D51/20 B65D51/28 L65D231/02 L65D251/00Y2F L65D251/00Y6A L65D517/00Y5D1 L65D543/00Y1F2C L65D543/00Y1H L65D543/00Y1M10 L65D543/00Y1M4 L65D543/00Y1M6 L65D543/00Y8D1C L65D543/00Y8D3 L65D543/00Y8D5

US class: 215/227 215/252 215/253 215/335 220/254 220/254.1 220/276 220/295 220/296 220/301 220/522 220/906

Classification Explorer

Cited documents: US5360126 A, US5255812 A, US5246125 A, US5215204 A, US5163571 A, US5147057 A, US5080246 A, US5056659 A, US4938370 A, US4913304 A, US4884706 A, US4883187 A, US4747500 A, US4643330 A, US4576305 A, US4473168 A, US4335825 A, US4275817 A, US4260067 A, US4202462 A, US4083471 A, US3931905 A, US3850329 A, US3834579 A, US3717276 A, US3690499 A, US3572540 A, US3561631 A, US3208620 A, US2398553 A, US2063157 A, US1028718 A, LU77084 A, GB1173765 A, FR1494200 A, DE9418851 U, DE4134741 A1,

Forward Citations: WO9948764, WO11054474, WO07054568, WO05018312, WO0212085, WO0015512, USD745399, USD745398, USD745397, USD745396, USD744833, USD713267, USD712753, USD707569, USD707568, USD684483, USD675527, USD671834, USD670167, USD639164, USD638708, USD625616, USD622145, USD621723, USD620360, USD619459, USD619458, USD619457, USD607754, USD601436, USD596048, USD593876, USD587137, USD554000, US9637269, US9272819, US8985371, US8931656, US8844761, US8833585, US8720717, US8573425, US8348079, US8336726, US8336725, US8240498, US8016148, US7918359, US6234338, US2011309105, US2011240648, US2011233227, US2010294768, US2010059516, US2009179033, US2009173737, US2008110887, US2008011702, US2007262079, US2007068943, US2006070994, US2004256389, US2004060935, JP2007501016, FR2812622, EP2757051, EP0913335,

Abstract:
Source: US5711447A A twist−on/twist−off resealable assembly for a can−end, such as a metal can used in the beverage industry includes a first set of knuckles formed on the can body near its top opening. A plurality of cooperating fingers on the inside of the can lid engage the knuckles so that the lid is tightened by its progressive downward motion as the lid is rotated. The lid also includes a weakened or frangible portion for forming a straw opening. A second set of knuckles are located below the top set of knuckles for engagement by fingers extending from a pilfer−proof ring. The twist−off can lid may be made from the same metal as the can body or alternatively from a transparent plastic material or a combination of metal and plastic.

0) US2008217347A – BEVERAGE CONTAINER PROTECTIVE COVER

99) Family number: 42146489 (US2008217347A) © PatBase

Title: BEVERAGE CONTAINER PROTECTIVE COVER

Priority: US20070714633 20070306

Family:

Publication number	Publication date	Application number	Application date
US2008217347 AA	20080911	US20070714633	20070306

Probable Assignee: MARKAJ VIKTOR

Assignee(s):(std)**:** MARKAJ VIKTOR

Inventor(s):(std)**:** MARKAJ VIKTOR

Agent(s): VIKTOR MARKAJ

International class (IPC 8–9)**:** B65D41/32 (Advanced/Invention); B65D41/32 (Core/Invention)

CPC: B65D17/166 B65D2517/0011 B65D2517/0025 B65D2517/0029 B65D2517/0041

European class: B65D17/16B2B L65D517/00Y2A L65D517/00Y3B L65D517/00Y4B L65D517/00Y5D1

US class: 220/713

Classification Explorer

Cited documents: US7198168 BB, US7089825 BB, US6722518 BA, US6626314 BA, US6098830 A, US6059137 A, US5813559 A, US5779087 A, US5462189 A, US5279841 A, US5139163 A, US5080249 A, US2007138178 AA, US2007131690 AA, US2005236411 AA, US2005051553 AA, US2002088802 AA,

Forward Citations: USD672235, USD658980, USD640141, US8708188, US8534490, US2012012586, US2011100854, GB2482504,

Abstract:
Source: US2008217347A The present invention provides a protective beverage cover for use in combination with a beverage can having a rim wall, a top wall, an unpunctured score–line defining an opening, a recessed base surrounding the unpunctured score–line, an annular groove formed by the junction of the rim wall and the top wall, and a ring pull tab. The protective cover comprises an overhanging lip which extends downward into the groove to allow rotation of the cover along the top wall and which permits covering of the area of the top wall which directly or indirectly engages a consumer's mouth during drinking of the beverage contents. A protrusion is formed by the upward extension of a central portion of the overhanging lip allows for rotation of the cover. A depression countered to sealably rest inside the recessed base surrounding the opening. The protective cover permits a second beverage container to be stacked on top of the first container by not interfering with the rim wall and by utilizing the annular groove.

0) US4276993A – EASY–OPENING CONTAINER WITH NON–DETACH TAB

100) Family number: 1399299 (US4276993A) © PatBase

Title: Easy–opening container with non–detach tab

Priority: CA19800350382 19800422 US19790083450 19791010

Family:

Publication number	Publication date	Application number	Application date
AR226076 A1	19820531	AR19800282824	19801009
AU198062646 A1	19810416	AU19800062646	19800923
BR8006524 A	19810414	BR19800006524	19801009
CA1130227 A1	19820824	CA19800350382	19800422
EP0027340 A1	19810422	EP19800303498	19801003
GR69991 B	19820723	GR19800163054	19801006
IL61249 A0	19801231	IL19800061249	19801010
JP56056734 U1	19810516	JP19800111261U	19800807
JP63040439 Y2	19881021	JP19800111261U	19800807
US4276993 A	19810707	US19790083450	19791010
ZA8006110 A	19810826	ZA19800006110	19801002

Probable Assignee: CONTINENTAL GROUP

Assignee(s):(std)**:** CONTINENTAL GROUP

Assignee(s): CONTINENTAL GROUP INC ; CONTINENTAL GROUP INC THE ; HASEGAWA GARY K ; INC ; THE CONTINENTAL GROUP ; THE CONTINENTAL GROUP INC

Inventor(s):(std)**:** HASEGAWA G ; HASEGAWA G K ; HASEGAWA GARY K

Inventor(s): G K HASEGAWA ; GK HASEGAWA

Agent(s): GRIFFITH HACK; SWABEY OGILVY RENAULT

Designated states: AT BE DE FR GB IT NL SE

International class (IPC 8–9): B65D17/00 B65D17/32 B65D17/34 B65D17/347 B65D17/353 B65D17/36 (Advanced/Invention); B65D17/00 B65D17/28 (Core/Invention); B65D (Subclass/Invention)

International class (IPC 1–7): B65D17/00 B65D17/32 B65D17/34 B65D17/36

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/269

Classification Explorer

Cited documents: US4062471 A, US4024981 A, US3952913 A, US3394837 A, US3294275 A, JP54016285 A2, JP53004684 A2, JP52029385 A2, JP51159666 U1, JP47001573 U1,

Forward Citations: WO9504683, WO9014280, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD620796, USD559680, USD523332, USD424438, US9446879, US9371152, US9248936, US9233784, US8950619, US8931660, US8727169, US8567158, US8505765, US8328041, US8313004, US8235244, US8205477, US7938290, US7909196, US7743635, US7703624, US7673768, US7506779, US7500376, US7380684, US7165696, US7100789, US7000797, US6951293, US6935826, US6889862, US6877941, US6848875, US6837093, US6575684, US6575325, US6435368, US6408498, US6405889, US6234336, US6164480, US6079583, US6065634, US6050440, US6026971, US6024239, US5967726, US5845811, US5749488, US5711448, US5653355, US5385254, US5248053, US5246127, US5064087, US4915290, US2014263328, US2009095752, US2007039961, US2007007294, US2006042344, US2005252917, US2005247717, US2005006395, US2004140309, US2004056032, US2003202862, US2003173367, US2003080132, US2002170913, JP60023145, JP5032255, JP4201851, DE3415643,

Abstract:
Source: US4276993A An easy opening container having an end panel with push−in section and a non−detachable tab secured to the end panel and formed with a uniquely shaped lift end portion having an aperture therein sufficient to admit the nodes of the user's grasping fingers but of a size less than would permit inserting a finger therethrough and the novel construction of the tab and presenting a finger placement limiting edge which is adapted to position the fingers of the user such as to prevent the user's fingernail from being broken in attempting to open said container.

0) US6524048B – APPARATUS FOR MANUFACTURING CAN LID

101) Family number: 13721984 (US6524048B) © PatBase

Title: Apparatus for manufacturing can lid

Priority: JP19990137776 19990518 JP20000075449 20000317

Family:

Publication number	Publication date	Application number	Application date
AT300372 E	20050815	AT20000304126T	20000516
DE60021472 D1	20050901	DE20006021472	20000516
DE60021472 T2	20060105	DE20006021472T	20000516
EP1055468 A2	20001129	EP20000304126	20000516
EP1055468 A3	20020821	EP20000304126	20000516
EP1055468 B1	20050727	EP20000304126	20000516
JP2001030034 A2	20010206	JP20000075449	20000317
JP4428797 B2	20100310	JP20000075449	20000317
US6524048 BA	20030225	US20000571545	20000516

Probable Assignee: SHOWA SEIKI CO LTD

Assignee(s):(std)**:** SHOWA SEIKI CO ; SHOWA SEIKI CO LTD

Inventor(s):(std)**:** HAMADA AKIHIRO ; SUGIMURA TAKESHI ; TAKAMATSU MASASHI ; TSUKADA SHINICHI

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

International class (IPC 8–9)**:** B21D51/26 B21D51/38 B21D51/44 (Advanced/Invention); B21D51/26 B21D51/38 (Core/Invention)

International class (IPC 1–7)**:** B21D51/26 B21D51/38 B21D51/44

CPC: B21D51/383

European class: B21D51/38B

US class: 413/14 413/17 413/66 413/67

Classification Explorer

Cited documents: WO9855366 A1, USRE33061 E, US6022179 A, US5876171 A, US5511920 A, US4932823 A, US4136629 A, US4106422 A, EP1052039 A1,

Forward Citations: WO17027727, WO16181305, WO10037998, WO06098597, US9340368, US9259913, US7784323, US7673490, US2015027327, US2010035739, US2010028104, US2008069666, EP1583620, DE102012209500,

Abstract:
Source: US6524048B A can lid of the fully–open type has a disk–shaped panel, a score notched endlessly in a surface of the panel along an outer circumferential edge of the panel, for forming an opening in the panel, and a tab fixed to the panel by a rivet. The tab is attached in a direction substantially perpendicular to an initial tear–off line of the score. The surface of the panel which is concealed from view by the tab is printed with a circular mark representing a rolling direction in which the material of the panel has been rolled. The score is defined such that the rolling direction extends substantially at a right angle to the initial tear–off line of the score. The panel has an auxiliary score defined in the surface thereof near the rivet and positioned across the rivet from the initial tear–off line substantially parallel to the initial tear–off line and separate therefrom.

0) US5216662A – LATCH MECHANISM FOR DISK DRIVES

102) Family number: 14982490 (US5216662A) © PatBase

Title: Latch mechanism for disk drives

Priority: US19870056142 19870529 US19890370075 19890620 WO1988US01720 19880524 US19910799760 19911127

Family:

Publication number	Publication date	Application number	Application date
AT120027 E	19950415	AT19880905293T	19880524
AU198819362 A1	19881221	AU19880019362	19880524
DE3853362 D1	19950420	DE19883853362	19880524
DE3853362 T2	19950727	DE19883853362T	19880524
EP0363419 A1	19900418	EP19880905293	19880524
EP0363419 A4	19910417	EP19880905293	19880524
EP0363419 B1	19950315	EP19880905293	19880524
IL86511 A0	19881115	IL19880086511	19880526
IL86511 A1	19920715	IL19880086511	19880526
JP2675113 B2	19971112	JP19880504939	19880524
JP3502265 T2	19910523	JP19880504939T	19880524
MX169878 B	19930729	MX19880011659	19880527
US5216662 A	19930601	US19910799760	19911127
WO8809552 A1	19881201	WO1988US01720	19880524

Probable Assignee: SEAGATE TECHNOLOGY LLC

Assignee(s):(std)**:** CONNER PERIPHERALS INC

Assignee(s): CONNER PERIPHERALS INC SAN JOSE CALIF US ; JPMORGAN CHASE BANK AS COLLATERAL AGENT ; JPMORGAN CHASE BANK COLLATERAL AGENT AS ; SEAGATE PERIPHERALS INC ; SEAGATE TECHNOLOGY INC ; SEAGATE TECHNOLOGY LLC ; CHASE MANHATTAN BANK AS COLLATERAL AGENT ; CHASE MANHATTAN BANK COLLATERAL AGENT AS

Inventor(s):(std)**:** STEFANSKY FREDERICK ; STEFANSKY FREDERICK M ; STEFANSKY FREDERICK MARK ; BAGNELL GLADE ; BAGNELL GLADE N

Inventor(s): BAGNELL GLADE N LONGMONT CO 80501 US ; STEFANSKY FREDERICK MARK LONGMONT CO 80501 US ; GLADE N BAGNELL ; FREDERICK MARK STEFANSKY

Agent(s): SANFORD TCOLB AND CO

Designated states: AT AU BE BR CH DE FR GB IT JP KR LI LU NL SE

International class (IPC 8–9): G11B21/22 G11B25/04 G11B33/12 G11B33/14 (Advanced/Invention); G11B21/22 G11B25/04 G11B33/12 G11B33/14 (Core/Invention)

International class (IPC 1–7): G11B15/10 G11B17/00 G11B21/02 G11B21/22 G11B5/54 G11B5/55

CPC: G11B21/22 G11B25/043 G11B33/121 G11B33/14

European class: G11B21/22 G11B25/04R G11B33/12 G11B33/12B G11B33/14

US class: 360/105 360/106 360/256.1 360/256.3 369/215 720/662 720/673 G9B/21.027 G9B/25.003 G9B/33.027 G9B/33.035

Classification Explorer

Cited documents: WO8702497 A1, US5041934 A, US5036416 A, US4989108 A, US4903157 A, US4879617 A, US4866554 A, US4833550 A, US4805055 A, US4714972 A, US4713714 A, US4706142 A, US4692829 A, US4692827 A, US4685303 A, US4647997 A, US4639863 A, US4635151 A, US4634303 A, US4594627 A, US4562500 A, US4553183 A, US4515251 A, US4484761 A, US4414594 A, US4342018 A, US4300176 A, US4173004 A, GB2170644 A1,

Forward Citations:

WO9641337, WO9610249, WO9422133, WO9409487, US8274755, US7990640, US7921543, US7248441, US6922300, US6822835, US6731468, US6310747, US6226146, US6205004, US6088222, US6049451, US5982587, US5859751, US5841610, US5835310, US5717548, US5715118, US5691879, US5579189, US5568333, US5452162, US5448435, US5404257, US5381290, US5315467, US5313124, US5296986, US4974222, US2010095516, US2008151403, US2008024930, US2004240117, US2004231140, US2003086209, GB2372285, GB2372285, EP1249831, EP0830672, EP0618578,

Abstract:
Source: US5216662A A latch mechanism for locking an actuator arm in a disk drive includes a latch pivotably supported in the disk drive for engaging the actuator arm and an electromagnet for capturing and holding the latch to disengage the latch from the actuator arm. A spring is provided to bias the latch to engage with the actuator arm. A swivel plate is provided on the actuator arm and the electromagnet captures the swivel plate; in particular, the electromagnet has two poles and the swivel plate contacts one of the poles and an air gap exists between the swivel plate and the other pole. The air gap allows the electromagnet to release the swivel plate. The swivelling action of the swivel plate causes the swivel plate to seat with the entire surface of the one pole of the electromagnet, increasing the ability of the electromagnet to hold the swivel plate once the swivel plate has been captured.

0) US2008004570A – COLLAGEN DELIVERY DEVICE

103) Family number: 41020111 (US2008004570A) © PatBase

Title: COLLAGEN DELIVERY DEVICE

Priority: US20060479916 20060630

Family:

Publication number	Publication date	Application number	Application date
US2008004570 AA	20080103	US20060479916	20060630
US8118779 BB	20120221	US20060479916	20060630

Probable Assignee: WARSAW ORTHOPEDIC INC

Assignee(s):(std)**:** GROSS JEFFREY M ; HADDOCK SEAN M ; SIMONTON THOMAS A ; TRIEU HAI H ; WARSAW ORTHOPEDIC INC

Inventor(s):(std)**:** GROSS JEFFREY M ; HADDOCK SEAN M ; SIMONTON THOMAS A ; TRIEU HAI H

Agent(s): LARSON NEWMAN ABEL POLANSKY AND WHITE LLP

International class (IPC 8–9): A61M37/00 (Advanced/Invention); A61M37/00 (Core/Invention)

CPC: A61K9/0024 A61K38/00 A61K47/42 A61M5/3158 A61M5/31586 A61M5/31595

European class: A61K47/42 K61K38/00 K61K9/00M5D K61M5/315F2A1 K61M5/315F2B2 K61M5/315F3B2

US class: 604/132 604/132P

Classification Explorer

Cited documents: WO9962439 A1, WO9961084 A1, WO9959669 A1, WO9943271 A1, WO9904720 A1, WO9722371 A1, WO9611642 A1, WO9210982 A1, WO8910728 A1, WO06138098 A1, WO06002417 A2, WO05118015 A1, WO05113032 A2, WO05107827 A1, WO05105168 A1, WO05102440 A2, WO05102433 A2, WO05099392 A2, WO05096978 A1, WO05092249 A1, WO05092248 A1, WO05081870 A2, WO05070439 A1, WO05070071 A2, WO05063316 A1, WO05049055 A1, WO05041813 A2, WO05034800 A2, WO05034781 A1, WO05032434 A1, WO05004755 A1, WO05000283 A2, WO04093934 A2, WO04073563 A2, WO04073532 A1, WO04060425 A2, WO04045667 A1, WO04041075 A2, WO04032808 A2, WO04026190 A2, WO04026189 A2, WO03099230 A2, WO03066120 A1, WO0240070 A1, WO0217825 A2, WO02054978, WO0200142 A1, WO0176654 A1, WO0075659 A1, WO0062832 A1, WO0034556, US7077865 BB, US7060103 BB, US7001431 BB, US6980862 BB, US6969404 BB, US6958077 BB, US6939329 BA, US6936072 BB, US6932843 BB, US6929640 BA, US6827716 BB, US6793677 BB, US6783546 BB, US6726691 BB, US6723335 BA, US6716251 BA, US6712853 BB, US6699294 BB, US6662805 BB, US6648918 BB, US6641587 BB, US6623963 BA, US6620196 BA, US6592625 BB, US6585696 BB, US6482235 BA, US6443988 BB, US6436119 BA, US6428576 BA, US6425919 BA, US6423083 BB, US6419702 BA, US6402784 BA, US6352558 BA, US6352557 BA, US6344058 BA, US6340369 BA, US6324710 BA, US6322786 BA, US6306189 BA, US6306177 BA, US6306169 BA, US6290715 BA, US6264695 BA, US6264659 BA, US6261311 BA, US6248131 BA, US6248110 BA, US6240926 BA, US6235043 BA, US6224630 BA, US6197061 BA, US6179872 BA, US6179872 B1, US6176880 BA, US6176880 B1, US6176398 BA, US6176398 B1, US6165489 A, US6146422 A, US6140452 A, US6126682 A, US6123731 A, US6122549 A, US6099514 A, US6095149 A, US6086594 A, US6080579 A, US6080194 A, US6077989 A, US6073051 A, US6066154 A, US6046379 A, US6027743 A, US6025538 A, US6022376 A, US6007570 A, US5994325 A, US5980504 A, US5976186 A, US5964807 A, US5948428 A, US5935849 A, US5922028 A, US5916870 A, US5894070 A, US5888220 A, US5858747 A, US5827289 A, US5788625 A, US5733337 A, US5713959 A, US5607478 A, US5571189 A, US5562736 A, US5549679 A, US5507810 A, US5478739 A, US5397352 A, US5376079 A, US5300029 A, US5258043 A, US5229497 A, US5192326 A, US5137514 A, US5110604 A, US5108438 A, US5106949 A, US5067962 A, US5007934 A, US4976733 A, US4946792 A, US4904260 A, US4880492 A, US4879135 A, US4837285 A, US4803075 A, US4801299 A, US4787900 A, US4772287 A, US4703108 A, US4661111 A, US4642120 A, US4642117 A, US4627853 A, US4614794 A, US4589881 A, US4582640 A, US4578079 A, US4544516 A, US4505266 A, US4458678 A, US4448718 A, US4424208 A, US4418691 A, US4400833 A, US4378224 A, US4350629 A, US4349921 A, US4344192 A, US4280954 A, US4185813 A, US4085466 A, US4060081 A, US3875595 A, US3855638 A, US3551560 A, US2007026053 AA, US2006044561 AA,

US2006019869 AA, US2005277996 AA, US2005273093 AA, US2005267583 AA, US2005267580 AA, US2005261684 AA, US2005256580 AA, US2005251259 AA, US2005240171 AA, US2005234557 AA, US2005234498 AA, US2005234493 AA, US2005222684 AA, US2005222538 AA, US2005209602 AA, US2005209601 AA, US2005209595 AA, US2005203537 AA, US2005203527 AA, US2005203206 AA, US2005197707 AA, US2005196387 AA, US2005191331 AA, US2005187556 AA, US2005187543 AA, US2005186673 AA, US2005182418 AA, US2005182414 AA, US2005177168 AA, US2005159817 AA, US2005154463 AA, US2005152986 AA, US2005149197 AA, US2005149046 AA, US2005149007 AA, US2005143688 AA, US2005131541 AA, US2005131540 AA, US2005125066 AA, US2005119754 AA, US2005119750 AA, US2005118228 AA, US2005113923 AA, US2005102030 AA, US2005100538 AA, US2005090901 AA, US2005070915 AA, US2005069571 AA, US2005055094 AA, US2005044561 AA, US2005019869 AA, US2005002909 AA, US2004260397 AA, US2004229786 AA, US2004228901 AA, US2004220102 AA, US2004220101 AA, US2004186471 AA, US2004172132 AA, US2004101959 AA, US2004092946 AA, US2004091540 AA, US2004083002 AA, US2004083001 AA, US2004073308 AA, US2004064023 AA, US2004059418 AA, US2004054414 AA, US2004034429 AA, US2004030392 AA, US2004024081 AA, US2004010251 AA, US2004003932 AA, US2003158607 AA, US2003130664 AA, US2003104026 AA, US2003008817 AA, US2002177866 AA, US2002176893 AA, US2002151979 AA, US2002133231 AA, US2002120347 AA, US2002116069 AA, US2002115742 AA, US2002082608 AA, US2002068975 AA, US2002068974 AA, US2002055143 AA, US2002049498 AA, US2002045942 AA, US2002038150 AA, US2002032155 AA, US2002029083 AA, US2002026195 AA, US2002016583 AA, US2001055594 AA, US2001051834 AA, US2001049531 AA, US2001049527 AA, US2001027199 AA, US2001024823 AA, US2001020476 AA, US2001016772 AA, US2001016195 AA, US2001011174 AA, US2001006948 AA, US2001004710 AA, JP2005152501 A2, JP2005118436 A2, JP2005103296 A2, JP2005/118436, GB2407580 A1, GB1515963, EP1610833 A2, EP1594558 A1, EP1594423 A2, EP1594421 A2, EP1585555 A2, EP1585448 A1, EP1582166 A2, EP1563809 A2, EP1563808 A1, EP1562652 A1, EP1549262 A1, EP1549261 A2, EP1545362 A2, EP1545352 A1, EP1517655 A1, EP1421957 A1, EP1416867 A1, EP1407729 B1, EP1328222 B1, EP1313412 B1, EP1214026 B1, EP1198209 B1, EP1051207 B1, EP0747067 A2, EP0305028 B1, EP0277678 A1, EP0157458 A1, DE19959975 A1,

Forward Citations: US8974502, US8715223, US8702677, US2011022028, US2010114075, US2010114069, EP2954912,

Abstract:
Source: US2008004570A A collagen delivery device is disclosed and can include a barrel having a syringe chamber. Further, a syringe can be disposed within the syringe chamber. The syringe can include a collagen material therein. Additionally, the collagen delivery device can include a plunger within the barrel. The plunger can be moved to expel the collagen material from the syringe.

0) US4681238A – RE–CLOSURE DEVICE FOR POP TOP CONTAINERS

104) Family number: 5332066 (US4681238A) © PatBase

Title: Re–closure device for pop top containers

Priority: US19860914829 19861003

Family:

Publication number	Publication date	Application number	Application date
US4681238 A	19870721	US19860914829	19861003

Probable Assignee: SANCHEZ RUBEN G

Assignee(s):(std)**:** SANCHEZ RUBEN G

Inventor(s):(std)**:** SANCHEZ RUBEN G

International class (IPC 8–9)**:** B65D17/50 B65D41/02 (Advanced/Invention); B65D17/00 B65D41/02 (Core/Invention)

International class (IPC 1–7)**:** B65D17/50 B65D41/02

CPC: B65D17/166

European class: B65D17/16B2B

US class: 220/260 220/263 220/270 220/336 220/821

Classification Explorer

Cited documents: US4463866 A, US4442950 A, US4410101 A, US4136797 A,

Forward Citations: WO14044606, WO12049280, WO11124552, WO06009483, WO05056400, WO0114218, USD747649, USD747199, USD671834, USD559680, US9463910, US9457930, US9371152, US9073655, US8931660, US8931656, US8857644, US8833585, US8727169, US8720717, US8505765, US8336726, US8336725, US8328041, US8313004, US8240498, US8235244, US8215513, US8205477, US7938290, US7918359, US7757889, US7743635, US7735673, US7677404, US7673768, US7506779, US7500577, US7500376, US7380684, US7198168, US7152753, US7100789, US7089825, US6935826, US6889862, US6877941, US6848875, US6763963, US6626314, US6575684, US6408498, US6347720, US6256786, US6220470, US6164480, US6065634, US5810189, US5653355, US5129773, US5080249, US2016059988, US2014353318, US2012292329, US2011233227, US2010294768, US2010133275, US2009179033, US2009173737, US2009026201, US2008302756, US2008272120, US2008110887, US2008078764, US2007262079, US2007145055, US2007131690, US2007068943, US2007007294, US2006163254, US2006042344, US2005284263, US2005247717, US2005115969, US2005051552, US2005006395, US2004056032, US2003202862, US2003173367, RU2559140, GB2342341, GB2342341, GB2331284, GB2331284, GB2326630, GB2307463, GB2307463, GB2258208, GB2258208, CN103946122, CN103946122, CN103328340, CN103328340, CN102917958, CN102917958, AU2011237908,

Abstract:
Source: US4681238A A resealable, anti–litter–type pop top beverage container wherein a rotatable tab member can be raised to depress a sealing member into the interior of the container to fully expose the lid opening for drinking or the like. The sealing member includes a second resealing lobe integral therewith and responsive to the rotation of the tab in a first direction for positioning the resealing tab beneath the lid opening and resealing the opening in an air–tight manner to prevent the escape of gases therefrom thereby preventing the beverage stored therein from going flat. The second or resealing member is also responsive to the rotation of the tab member in the opposite direction for unseating the resealing member and reexposing the lid opening to enable the remaining stored liquid contained therein to be drunk or poured therefrom.

0) US3446390A – OPENING MEANS FOR SEALED CONTAINERS

105) Family number: 91073 (US3446390A) © PatBase

Title: OPENING MEANS FOR SEALED CONTAINERS

Priority: US19680720012 19680410

Family:

Publication number	Publication date	Application number	Application date
AU206953103 A1	19701015	AU19690053103	19690408
BE731042 A	19691006		19690404
DE1917141 A1	19700611	DE19691917141	19690402
DE1917141 B2	19730830	DE19691917141	19690402
DE1917141 C3	19740314	DE19691917141	19690402
DK124531 B	19721030	DK19690001922	19690408
FR2005920 A1	19691219	FR19690010239	19690403
GB1217295 A	19701231	GB19690017113	19690401
NL6905414 A	19691014	NL19690005414	19690408
SE349999 B	19721016	SE19690004883	19690408
US3446390 A	19690527	US19680720012	19680410

Probable Assignee: ALUMINUM CO OF AMERICA

Assignee(s):(std)**:** ALUMINUM CO OF AMERICA

Assignee(s): ALUMINUM CO OF AMERICA PITTSBURGH PA V ST A ; ALUMINUM COMPANY ; ALUMINUM COMPANY OF AMERICA ; ALUMINUM CY ; ALUMINIUM CO OF AMERICA ; ALUMINUM CO

Inventor(s):(std)**:** EDWIN HEFFNER ROBERT ; HEFFNER R ; HEFFNER ROBERT E ; HEFFNER ROBERT EDWIN

Inventor(s): HEFFNER ROBERT EDWIN LOWER BURRELL PA V ST A ; ROBERT E HEFFNER ; ROBERT EDWIN HEFFNER

International class (IPC 8–9): B65D17/34 B65D17/40 B65D41/00 (Advanced/Invention); B65D41/00 (Core/Invention)

International class (IPC 1–7): B65D17/22 B65D17/24 B65D17/34 B65D41/00

CPC: B65D17/163

European class: B65D17/16B1

US class: 220/273 220/54 222/541.9 D9/438

Classification Explorer

Cited documents: US3250425 A, US2029328 A,

Forward Citations: WO03039785, US3938696, EP1308226,

Abstract:
Source: US3446390A ABSTRACT OF THE DISCLOSURE This disclosure concerns container ends or closures for containers that have an end panel that is recessed respecting a shoulder and is provided with a score line to define a tear–out section. A tab opening device having a cam portion is rotatably attached to the tear–out section in a position such that rotation of the tab opening device about the attachment means brings the cam portion of the tab opening device to bear against the shoulder and causes the score line to rupture.

0) US3664543A – EASY–OPEN TEAR STRIP REINFORCING MEANS

106) Family number: 1005750 (US3664543A) © PatBase

Title: EASY–OPEN TEAR STRIP REINFORCING MEANS

Priority: US19700079218 19701008

Family:

Publication number	Publication date	Application number	Application date
US3664543 A	19720523	US19700079218	19701008

Probable Assignee: FRAZE ERMAL C

Assignee(s):(std)**:** FRAZE ERMAL C

Assignee(s): ERMAL C FRAZE

Inventor(s):(std)**:** BROWN OMAR L ; FRAZE ERMAL C

Inventor(s): OMAR L BROWN ; ERMAL C FRAZE

International class (IPC 8–9): B21D51/38 B21D51/44 (Advanced/Invention); B21D51/38 (Core/Invention)

International class (IPC 1–7): B21D51/38 B21D51/44

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/270 220/54

Classification Explorer

Forward Citations: US9517866, US7425191, US7226405, US3930592, US2005184099, US2005164860,

Abstract:
Source: US3664543A ABSTRACT OF THE DISCLOSURE A coined indentatura at the bending line of an easy–open can end tear strip. The indentation has rtearly vertical side walls of increased thickness and the metal be– 15 tab leverage point. This line is usually rather short in Under the normal pressures of compétition, it has be–come necessary to reduce the cost of such can ends and one of the more populaer courses of action in accomplish–ing this result has ibeen to provide them with greater tensile strength so that the thickness of the end wall can be reduced accordingly. In other words, the can ends are thinner but are proportionately stronger than those orig–inally used. However, this combination of properties also causes them to be more brittle. Since the end wall, and consequently the tear strip, are relatively thin, the rotation of the tab through a large angle causes a relatively sharp crease to be formed in the tear strip metal along a bending line which is closely adjacent the attachment rivet and directly below the length since the opposite portions of the rupturing score are very closely spaced in that area. Since the tear strip metal is very brittle due to the reasons described above, the stresses created along the bending line when the tab 20 is rotated through a large angle are often great enough to cause the tear strip to break along that line when the tab is rotated back toward its initial position. As a result, the person opening the can in this manner is unable to remove a major portion of the tear strip The present invention relates to a means for increas– 25 since the crease which breaks is very close to the posi–ing the ability of an easy–open can end tear strip to with– tlon m which the score is initially ruptured. When this stand bending without fracturing. More specifically, the occurs, a pliers or other tool must be used to remove the invention relates to a method of increasing the strength remaining portion of the tear strip or the produci must of a tear strip in an area therein within which sharp be dispensed through the small opemng resulting be–creases tend to form in such can ends when the cans are 30 tween the initial score–rapturing position and the crease, tween the coined area and the tear–strip severing score is in compression. This prevents the formation of cracks in the score and increases the strength of the strip to prevent its breaking when a crease is formed when the can is opened improperly. B

0) US3606076A – CONTAINER OPENING MEANS

107) Family number: 969712 (US3606076A) © PatBase

Title: CONTAINER OPENING MEANS

Priority: US19690822509 19690507

Family:

Publication number	Publication date	Application number	Application date
CA950382 A1	19740702	CA19700080559	19700420
GB1313734 A	19730418	GB19700022049	19700507
JP51003260 B4	19760202	JP19700038380	19700507
US3606076 A	19710920	US19690822509	19690507

Probable Assignee: AMERICAN NATIONAL CAN CO

Assignee(s):(std)**:** AMERICAN CAN CO

Assignee(s): AMERICAN CAN COMPANY ; AMERICAN CAN PACKAGING INC ; AMERICAN NATIONAL CAN CO ; LA CROCE LEONARD T ; HANKE EDWARD H

Inventor(s):(std)**:** LA CROCE LEONARD T ; HANKE EDWARD H ; HANKE EDWARD HERMAN ; CROCE LEONARD THOMAS LA

Inventor(s): EDWARD HERMAN HANKE ; LEONARD THOMAS LA CROCE

International class (IPC 8–9)**:** B21J15/02 B65D17/34 B65D17/347 B65D17/35 B65D17/353 B65D41/32 (Advanced/Invention); B21J15/00 B65D17/28 B65D41/32 (Core/Invention)

International class (IPC 1–7)**:** B21J15/02 B65D17/02 B65D17/08 B65D17/18 B65D17/24 B65D41/32

CPC: B65D17/163

European class: B65D17/16B1

US class: 220/273 220/54

Classification Explorer

Cited documents: JP39006350 A2,

Forward Citations: US8109405, US7922025, US7677404, US5232114, US5052573, US4596342, US3782586, US3781972, US2014231432, US2008314906, US2008078764, US2008067171, FR2515610, EP0079294,

Abstract:
Source: US3606076A ABSTRACT OF THE DISCLOSURE In order to prevent rotation of a pull tab about a rivet which secures it to the scored end closure of a container, a plurality of recesses are indented into the upper surface of marginal edge portion of the tab which 15 defines the opening in the tab in which the rivet is re–ceived. Upon formation of the rivet head to secure the pull tab to the end closure, the metal of the rivet head is caused to flow into the recesses in the tab to lock the latter against rotation on the rivet. 20 B

0) GB1578017A – EASY OPENING CANS

108) Family number: 5038971 (GB1578017A) © PatBase

Title: EASY OPENING CANS

Priority: GB19760006718 19770214

Family:

Publication number	Publication date	Application number	Application date
GB1578017 A	19801029	GB19760006718	19770214
ZA7700849 A	19771228	ZA19770000849	19770214

Probable Assignee: METAL BOX CO LTD

Assignee(s):(std)**:** METAL BOX CO LTD

Assignee(s): METAL BOX LTD

Inventor(s):(std)**:** BEVERIDGE J ; COLLIER W

International class(IPC 8–9)**:** B65D51/16 B65D51/22 (Advanced/Invention); B65D51/16 B65D51/18 (Core/Invention)

International class(IPC 1–7)**:** B65D51/16

CPC: B65D17/163 B65D51/222 B65D2205/00 B65D2251/0018 B65D2251/0071

European class: B65D17/16B1 B65D51/22 B65D51/22A1 L65D205/00 L65D251/00Y2F L65D251/00Y6A

Classification Explorer

Forward Citations: FR2751617, FR2742417, EP0279971, EP0279971, EP0070821,

Abstract:
Source: GB1578017A [Source: Claim 1] 1. A container which has a tubular body, an easy opening end closing one end of the body, and a plastics overcap removably snap–fitted onto said one end of the body so as to overlie the easy–opening end, the easy–opening end having a removable panel portion defined therein by a first score line and having a pull tab attached to the removable panel portion, a second score line being formed in the removable panel portion such that portions of said second score line lie adjacent to respective side edges of the pull tab, the plastics overcap being rotatable and having a deformable panel carrying an indentor which extends towards the easy–opening end and which is arranged for movement, upon rotation of the overcap, into abutment with a respective one of the side edges of the pull tab and into alignment with a respective one of said portions of the second score line whereupon pressure applied to the deformable panel of the overcap above the indentor may fracture the easy–opening end at the respective one of said portions.

0) US3977561A – CAN END WITH NONDETACHABLE TEAR TAB AND OPENING...

109) Family number: 1316860 (US3977561A) © PatBase

Title: CAN END WITH NONDETACHABLE TEAR TAB AND OPENING RING

Priority: US19750617931 19750929

Family:

Publication number	Publication date	Application number	Application date
US3977561 A	19760831	US19750617931	19750929

Probable Assignee: WELLS VERA T

Assignee(s):(std)**:** STROBE CARL J ; WELLS ROBERT A

Assignee(s): WELLS VERA T ; WELLS VERA T DENVER CO

Inventor(s):(std)**:** STROBE CARL J ; WELLS ROBERT A

International class(IPC 8–9)**:** B65D17/32 B65D41/32 (Advanced/Invention); B65D17/28 B65D41/32 (Core/Invention)

International class(IPC 1–7)**:** B65D17/24 B65D17/32 B65D41/32

CPC: Y10S220/906 B65D17/165

European class: B65D17/16B2

US class: 220/269 220/906

Classification Explorer

Cited documents: US3860143 A, US3843011 A, US3795342 A, US3744667 A,

Forward Citations: WO14150180, WO11156140, WO11053776, USRE31702, USD432015, US9561888, US9511411, US9315290, US8640905, US8215513, US7165696, US6405889, US6234336, US6050440, US6024239, US5711448, US5555992, US5497896, US5335808, US5248053, US5145086, US5129541, US5007554, US4998641, US4915290, US4901880, US4781303, US4361251, US4211335, US4210257, US4162743, US4150765, US4148410, US4130074, US4108331, US4084721, US4062471, US4024981, US2010126994, US2009095752, US2007215620, JP2008514511, GB2125762, FR2528798, FR2459182, FR2459181, EP1194337, DE3415643, DE3223286, DE2855037,

Abstract:
Source: US3977561A An easy opening container having a wall in which a tear tab is formed which is nondetachably removable from the wall. An opening tab lies alongside the wall with a nose portion overlying the tear tab, and with a handle portion lying alongside the wall at a location spaced from the tear tab portion. The opening tab is nondetachably connected to the wall by a bendable member having a bend line which permits the handle portion to be moved away from the wall, so that the nose portion moves inwardly into contact with the tear tab. The bendable connection between the handle and the wall remains on the wall at all times, and the opening tab is provided with means which permit only a limited extent of the opening tab to enter into the opening defined by tearaway and inward bending of the tear tab. An air vent into the opened container is provided.

0) US2012116463A – SYSTEM FOR OSTEOSYNTHESIS, IN PARTICULAR FOR VE...

110) Family number: 48201337 (US2012116463A) © PatBase

Title: SYSTEM FOR OSTEOSYNTHESIS, IN PARTICULAR FOR VERTEBRAL OSTEOSYNTHESIS

Priority: FR20090003607 20090722 WO2010FR00514 20100719

Family:

Publication number	Publication date	Application number	Application date
EP2456375 A1	20120530	EP20100747907	20100719
FR2948276 A1	20110128	FR20090003607	20090722
FR2948276 B1	20120302	FR20090003607	20090722
US2012116463 AA	20120510	US20100386101	20100719
WO11010012 A1	20110127	WO2010FR00514	20100719

Probable Assignee: RAZIAN HASSAN

Assignee(s):(std)**:** RAZIAN HASSAN

Assignee(s): HASSAN RAZIAN

Inventor(s):(std)**:** RAZIAN HASSAN

Inventor(s): HASSAN RAZIAN

Agent(s): FLAVENOT BERNARD; ABRITT

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A61B17/70 A61B17/86 (Advanced/Invention)

CPC: A61B17/7032 A61B17/7037 A61B2017/868

European class: A61B17/70B2 A61B17/70B5B K61B17/86N2D

US class: 606/305 606/305P

Classification Explorer

Cited documents: WO06102361 A1, US2005277925 AA, US2005049589 AA, US2003187433 AA, US2003004511 AA,

Forward Citations: WO15059590, US2016008035,

Abstract:
Source: US2012116463A An osteosynthesis system includes a pedicular screw and a bar of longitudinal axis, the screw having a U–shaped head with two branches and a base for defining an inter–branch space in which the bar is received, a screw shank with a bone thread, and elements for blocking the bar in the space and including at least a tab and movement elements for moving the tab relative to the branches in a plane substantially parallel to the axis, the movement elements being arranged so that the tab occupies two positions, a first position where the tab does not co–operate with the bar, and a second position where the tab co–operates with at least one of the branches in such a manner that at least a portion of the tab is situated in the space and applies on the bar a pressure force that is directed towards the base of the U–shape.

0) US4793510A – RESEALABLE CONTAINER CLOSURE

111) Family number: 2799901 (US4793510A) © PatBase

Title: Resealable container closure

Priority: EP19880305889 19880629 US19870073080 19870713

Family:

Publication number	Publication date	Application number	Application date
AT72189 E	19920215	AT19880305889T	19880629
AU1901788 A1	19890119	AU19880019017D	19880713
AU198819017 A1	19890119	AU19880019017	19880713
BRPI8803501 A	19890131	BR1988PI03501	19880712
CN1013094 B	19910710	CN19881004345	19880713
CN1038623 A	19900110	CN19881004345	19880713
DE3868161 D1	19920312	DE19883868161	19880629
DK388388 A	19890114	DK19880003883	19880712
DK388388 A0	19880712	DK19880003883	19880712
EP0299644 A2	19890118	EP19880305889	19880629
EP0299644 A3	19890823	EP19880305889	19880629
EP0299644 B1	19920129	EP19880305889	19880629
IL86742 A0	19881130	IL19880086742	19880614
IL86742 A1	19910630	IL19880086742	19880614
JP1037358 A2	19890208	JP19880173636	19880712
JP64037358 A2	19890208	JP19880173636	19880712
NZ225244 A	19910528	NZ19880225244	19880630
PH25068 A	19910219	PH19880037101	19880621
SU1651785 A3	19910523	SU19884356067	19880712
US4793510 A	19881227	US19870073080	19870713
ZA8804310 A	19890329	ZA19880004310	19880616

Probable Assignee: REYNOLDS METALS CO

Assignee(s):(std)**:** REYNOLDS METALS CO ; REYNOLDS METALS CO REYNOL

Assignee(s): REYNOLDS METALS CO RICHMOND VA US ; REYNOLDS METALS COMPANY ; REYNOLDS METALS COMPANY REYNOLDS METALS BUILDING ; REJNOLDS METALZ KOMPANI FA ; REJNOLDS METALZ KOMPANI FIRMA

Inventor(s):(std)**:** ARFERT HORST F W ; ARFERT HORST F W CUDZIK DANIEL ; CUDZIK DANIEL FRANK ; DANIEL F CUDZIK ; DANIERU EFU KADOJIKU ; DONALDSON RODZHER KH ; DONALDSON ROGER H ; ARFERT KHORST F V ; CUDZIK DANIEL F ; HOOSUTO EFU DABURIYUU ARUFUAAT ; HORST F W ARFERT ; KUDZIK DANIEL F ; ROGER H DONALDSON ; ROJIYAA EICHI DONARUDOSON

Inventor(s): RODZHER KH DONALDSON US ; HORST FW ARFERT ; KHORST F V ARFERT US ; HOOSUTO EFU DABURIYUU ARUFUAATO ; CUDZIK DANIEL F RICHMOND VIRGINIA 23225 US ; DONALDSON ROGER H WHITE STONE VIRGINIA 23578 US ; DANIEL F KUDZIK US ; DANIEL FRANK CUDZIK ; ARFERT HORST F W CUDZIK DANIEL F DONALDSON ROGER H ; ARFERT HORST F W MIDLOTHIAN VIRGINIA 23113 US ; ARFERT HORST FW

Agent(s): CALLINANS; REINHOLD COHN AND PARTNERS

Designated states: AT BE CH DE ES FR GB GR IT LI LU NL SE

International class(IPC 8–9)**:** B65D41/18 B65D41/60 B65D51/16 (Advanced/Invention); B65D41/02 B65D41/32 B65D51/16 (Core/Invention)

International class(IPC 1–7)**:** B65D41/16 B65D41/18 B65D41/22 B65D41/40 B65D41/42 B65D41/46 B65D41/60 B65D45/00 B65D45/02 B65D51/00 B65D51/14 B65D51/16 B65D51/18

CPC: B65D41/18 B65D51/1661

European class: B65D41/18 B65D51/16D3

US class: 215/320 215/321 220/260 220/306 220/309 220/780 220/793

Classification Explorer

Cited documents: US4574975 A, US4487326 A, US4465205 A, US4399924 A, US4387820 A, US4376493 A, US4356929 A, US4341324 A, US4301941 A, US4291813 A, US4262815 A, US4113134 A, US4106662 A, US4094460 A, US4061244 A, US3994410 A, US3907158 A, US3727787 A, US3688942 A, US3642167 A, US3628542 A, US3606074 A, US3589551 A, US3527375 A, US3486665 A, US3352448 A, US3074578 A, US2953272 A, US2922563 A, US2869746 A, US2819748 A, US2776691 A, US2711840 A, US2704100 A, US2639058 A, US2620938 A, US2614727 A, US25906 A, US2486364 A, US2393578 A, US2303773 A, US2215392 A, US2208899 A, US2168734 A, US2084084 A, US2070377 A, US2036858 A, US2004852 A, US1946981 A, US1902892 A, US1613826 A, US1546159 A, US1201082 A, NL74121 C, GB693027 A, GB465368 A, GB2122587 A1, GB2091706 A1, GB2021532 A1, GB1438136 A, GB1407601 A, GB1389747 A, GB1282754 A, GB1054335 A, GB1054334 A, FR836941 A, FR828967 A, FR828633 A, FR677495 A, FR368095 A, FR2499029 A1, FR2464196 A1, FR2427956 A1, FR2377333 A1, FR1505614 A, FR1370442 A, FR1216506 A, FR1149455 A, FR1023521 A, EP0140686 A2, DE826555 A, DE8228681 U, DE7801717 U, DE3216868 A1, DE3208994 A1, DE3207198 A1, DE2814594 A1, DE2718692 A1, DE1924472 A1, DD144746 A5, CH193582 A, CH109104 A,

Forward Citations: USD512872, USD432859, USD432858, USD429965, USD428777, US9637269, US9327859, US9272819, US9211969, US9139324, US8844761, US8376163, US8317043, US8011524, US7861881, US7805542, US7299941, US7014060, US6010028, US6010026, US5822843, US5778723, US5718352, US5704240, US5624051, US5507407, US5425467, US5103990, US4991732, US4982862, US4957216, US4932555, US4928844, US2012061395, US2011204058, US2010072164, US2008041808, US2006266751, US2006091140, US2004206765, US2004060935, GB2349636,

Abstract:
Source: US4793510A A resealable closure device for use on metallic cans includes a metallic end wall having an opening surrounded by an upwardly extending and outwardly flaring beaded flange. The flexible closure element includes a central panel, a lever portion and a connecting portion connecting the lever portion to the central panel; the closure device is molded in an inverted umbrella position which is capable of being inverted to engage the flange of the opening; a skirt portion is provided on the interior side of the central panel of the flexible closure element to provide a degree of resistance to removal of the closure device from the opening by user.

0) US2014237952A – METHOD AND APPARATUS FOR OPENING OF CONTAINERS ...

112) Family number: 57264823 (US2014237952A) © PatBase

Title: METHOD AND APPARATUS FOR OPENING OF CONTAINERS

Priority: US20130780124 20130228

Family:

Publication number	Publication date	Application number	Application date
US2014237952 AA	20140828	US20130780124	20130228

Probable Assignee: FESLER LANCE

Assignee(s):(std)**:** FESLER LANCE

Inventor(s):(std)**:** FESLER LANCE

International class (IPC 8–9)**:** B67B7/12 (Advanced/Invention)

CPC: B67B7/24 B67B7/403 B67B7/16

US class: 53/492 81/3.47

Classification Explorer

Cited documents: USD171415 S1, US8695457 BB, US5212869 A, US4932130 A, US2761210 A, US2014069065 AA, US2012285297 AA, US2008222815 AA, US2005076742 AA, US2004056033 AA, US1812386 A, US1295353 A,

Forward Citations: USD754921, USD753877, US9272891, US9260282, US2016207749, US2015101200, US2014069065,

Abstract:
Source: US2014237952A A method and opener for creating openings in the sidewalls of bead seam containers, such as a pop−top can, to allow air to enter the container when the contents are poured is formed to include a mounting body (140). A seam engagement element (150) sized and shaped to fit the bead seam of a container and a piercing element (152) sufficient to pierce the sidewall of the container are positioned a predetermined distance from each other and in physical association with the mounting body (140) to pierce above the fill level of the container. The bead seam of a container may be inserted into the engagement element (150) creating a fulcrum, then rotated to engage the piercing element (152) to form an opening for air to enter the container when it is poured. These means may be mounted for stationary use (134) or have a handle attached (102) for portability. The portable opener with handle (102) extends a lever body from the mounting body (150) and is operated by placing the engagement element (150) on the bead seam of the container and rotating the handle (106) about the created fulcrum to engage the piercing element (152). These means have been integrated with examples of known bottle openers and tab lifters (20) creating an opener that is capable of lifting pop−top can tabs, opening bottles, and creating openings in the sidewalls of pop−top cans.

0) US2320361A – CONTAINER–TAB MARKING MACHINE

113) Family number: 21402430 (US2320361A) © PatBase

Title: Container–tab marking machine

Priority: US19370173050 19371105 US19410421672 19411204

Family:

Publication number	Publication date	Application number	Application date
US2284660 A	19420602	US19370173050	19371105
US2320361 A	19430601	US19410421672	19411204

Probable Assignee: AMERICAN CAN CO

Assignee(s):(std)**:** AMERICAN CAN CO

Assignee(s): AMERICAN CAN COMPANY

Inventor(s):(std)**:** ALMGREN AUGUST E ; HOTHERSALL JOHN M

International class (IPC 8–9)**:** B41F17/24 B65B43/42 (Advanced/Invention); B41F17/00 B65B43/42 (Core/Invention)

International class (IPC 1–7)**:** B41F17/16 B65B43/42 B67C3/04

CPC: B41F17/24 B65B43/42

European class: B41F17/24 B65B43/42

US class: 101/11 53/382.1 53/411

Classification Explorer

Forward Citations: WO9512492, US4815256, US3956871, US3775943, US2997833, US2948425, US2821824, US2740351, US2673020, US2653745, US2635801, US2570186, US2420642, US2006049220,

Abstract:
Source: US2320361A 1. In a machine for treating containers having tabs for carrying the containers, the combination of feeding devices for advancing containers along a predetermined path of travel, a. tab raising element adjacent said path of travel of the containers for arranging the container tabs in a predetermined position, and a marking mechanism adjacent said tab raising element for impressing a desired mark on the arranged tabs of the advancing containers.

0) US2013341297A – DRINKING CONTAINER

114) Family number: 50818090 (US2013341297A) © PatBase

Title: DRINKING CONTAINER

Priority: US20100382785P 20100914 US20110452377P 20110314 WO2011US51534 20110914 US20110821375 20110914

Family:

Publication number	Publication date	Application number	Application date
CA2810872 AA	20130307	CA20112810872	20110914
CN103189033 A	20130703	CN201180054774	20110914
EP2616036 A1	20130724	EP20110758667	20110914
IL225039 A0	20130430	IL20110225039	20110914
IN02280DN2013 A	20141031	IN2013DN02280	20130313
MX2013002931 A1	20130405	MX20130002931	20110914
NZ608453 A	20131220	NZ20110608453	20110914
RU2013110490 A	20141020	RU20130110490	20110914
SG188407 A1	20130430	SG20130016316	20110914
US2013341297 AA	20131226	US20110821375	20110914
WO12037206 A1	20120322	WO2011US51534	20110914

Probable Assignee: ABBOTT LAB

Assignee(s):(std)**:** SAUNDERS CRAIG ; BOLL DAVID ; PERRY JAMES P ; KALMAN JEFFREY ; STEPHAN GARY ; ZUCCARO ANTHONY ; SPIRK EVAN ; SAUNDERS SANDRA ; ABBOTT LAB

Assignee(s): ABBOTT LABORATORIES

Inventor(s):(std)**:** BOLL DAVID ; KALMAN JEFFREY ; PERRY JAMES P ; SAUNDERS CRAIG ; SPIRK EVAN ; STEPHAN GARY ; ZUCCARO ANTHONY

Inventor(s): CRAIG SAUNDERS ; DAVID BOLL ; EVAN SPIRK ; GARY STEPHAN ; JAMES P PERRY ; JEFFREY KALMAN ; ANTHONY ZUCCARO

Agent(s): MBM INTELLECTUAL PROPERTY LAW LLP; RICKER MATHIAS; MUELLER LISA V ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A61J A61J9/00 A61J9/08 B65D23/04 (Advanced/Invention)

CPC: A61J9/00 A61J9/085 A61J2200/76 A61J9/0623

European class: A61J9/00 A61J9/08A K61J200/76 K61J9/06G

US class: 215/11.1 366/130

Classification Explorer

Cited documents: WO9707724 A1, US61452377, US61382785, US5305928 A, US2010072162 AA, US2004089626 AA, CN2280514 Y, CN101663015 A,

Forward Citations: WO15157549, USD757494, USD716461,

Abstract:
Source: US2013341297A A drinking container and its components are described. A cap for the baby bottle includes a reservoir for storage of a dry powder formula. A clamp ring locking indicator for a container is described. The locking indicator indicates when the clamp ring is correctly engaged to the container. A clamp ring also threads and locks to the container with an approximately 180 degree turn. A stir insert for the baby bottle is described. The stir insert is positioned in an interior of the container in order to promote the mixing of the dry powder formula with the liquid. The stir insert includes a paddle portion that oscillates or moves in a back–and–forth manner as the bottle is shaken or stirred. A system cup is described. A single container has

different attachments for the period from newborn to childhood to allow a single cup to be used throughout that entire time period.

115) Family number: 11242430 (US5232113A) © PatBase

Title: VENTING RESEALABLE CONTAINER CLOSURE AND ASSOCIATED METHOD OF MANUFACTURE

Priority: US19910774931 19911011

Family:

Publication number	Publication date	Application number	Application date
US5232113 A	19930803	US19910774931	19911011

Probable Assignee: ALUMINUM CO OF AMERICA

Assignee(s):(std)**:** ALUMINUM CO OF AMERICA

Assignee(s): ALUMINUM CO OF AMERICA A OF PA CORP ; ALUMINUM COMPANY OF AMERICA ; ALUMINUM CO

Inventor(s):(std)**:** BURTON WILLIAM L ; CHEN TSAI CHARLOTTE H ; CORNETTA JOHN E ; HILLS DAVID S

International class (IPC 8–9): B65D51/16 (Advanced/Invention); B65D51/16 (Core/Invention)

International class (IPC 1–7): B65D53/00

CPC: B65D17/166 B65D51/1633

European class: B65D17/16B2B B65D51/16D

US class: 220/203 220/203.17 220/209 220/240 220/270 220/367 525/240

Classification Explorer

Cited documents: US4948665 A, US4932555 A, US4928844 A, US4917258 A, US4885352 A, US4799598 A, US4783985 A, US4685849 A, US4678096 A, US4648528 A, US4632955 A, US4580692 A, US4148410 A, US4130618 A, US4024981 A, US3997076 A, US3977341 A, US3969304 A, US3929251 A, US3549038 A, US3021962 A, US2770608 A, US2615857 A, US2577816 A, US2504270 A, US2499756 A, US2434662 A, US2238681 A, GB1112025 A, EP0219265 A2, CA1106520 A1,

Forward Citations: US8430259, US8215513, US6626314, US6220470, US2011192487, US2009250465,

Abstract:
Source: US5232113A A cap for substantially gas−tight sealing engagement with a container wall having an opening therein circumscribed by a sealing surface has an end wall and a depending skirt with a portion for securing the cap to the container wall. The cap is preferably composed of about 94.5 to 99.89 weight percent low density polyethylene and may have a polybutylene copolymer present in an amount of about 0.01 to 5.0 weight percent. A mold release agent may be employed. A tab for manual engagement to rotate the cap between a container wall sealing surface engaging position and a storage position may be provided. The cap has a vent region provided by a weakened zone that is preferably located on or near the tab. The cap is adapted once in gas−tight sealing engagement with the sealing surface of the container wall to vent automatically in the weakened zone upon predetermined internal container pressure being attained and to subsequently reseal automatically. A container in combination with such a cap is also disclosed. A method of cap manufacture is disclosed.

0) US4383621A – PULL TAB FOR AN EASY OPENING CAN

116) Family number: 28830540 (US4383621A) © PatBase

Title: Pull tab for an easy opening can

Priority: CA19810381287 19810707 EP19810420100 19810707 FR19800015578 19800709

Family:

Publication number	Publication date	Application number	Application date
AT7775 E	19840615	AT19810420100T	19810707
CA1164817 A1	19840403	CA19810381287	19810707
DE3163974 D1	19840712	DE19813163974	19810707
DK302681 A	19820110	DK19810003026	19810708
EP0043786 A1	19820113	EP19810420100	19810707
EP0043786 B1	19840606	EP19810420100	19810707
ES260046 U	19820316	ES19810260046U	19810818
ES260046 Y	19821116	ES19810260046U	19810818
FR2486495 A1	19820115	FR19800015578	19800709
FR2486495 B1	19840106	FR19800015578	19800709
GR75279 B	19840713	GR19810165416	19810702
IE51376 B	19861210	IE19810001534	19810708
IE811534 L	19820109	IE19810001534	19810708
JP1286893 C3	19851031	JP19810105144	19810707
JP57055854 A2	19820403	JP19810105144	19810707
JP60010940 B4	19850322	JP19810105144	19810707
MA19208 A1	19820401	MA19810019408	19810707
PT73337 A	19810801	PT19810073337	19810708
PT73337 B	19820901	PT19810073337	19810708
US4383621 A	19830517	US19810279159	19810630

Probable Assignee: CEBAL

Assignee(s):(std)**:** CEBAL ; SEBARU

Assignee(s): MENEGHIN RENE ; CEBAL A CORP ; CEBAL SA ; HURTHER ERNEST

Inventor(s):(std)**:** ERNEST HURTHER ; ERUNESU URUTERU ; HURTHER ERNEST ; MENEGHIN RENE ; RENE MENEGHIN ; RUNE MUNUGIN ; R MENECHIN ; MENEGHIN R ; HURTHER E ; E HURTHER

Inventor(s): RENE MENEGHIN ET ERNEST HURTHER

Agent(s): ROBIC ROBIC AND ASSOCIES ASSOCIATES

Designated states: AT BE CH DE FR GB IT LI LU NL SE

International class (IPC 8–9)**:** B65D17/28 B65D17/32 B65D17/34 B65D17/347 B65D17/353 B65D17/50 B65D45/00 (Advanced/Invention); B65D17/00 B65D17/28 B65D45/00 (Core/Invention); B65D (Subclass/Invention)

International class (IPC 1–7)**:** B65D17/28 B65D17/32 B65D17/34 B65D17/50 B65D45/00 B65DA

CPC: B65D17/16

European class: B65D17/16

US class: 220/273

Classification Explorer

Cited documents: US4183445 A, US4148410 A, US4030631 A, US4015744 A, US3967750 A, US3485411 A, US3232474 A, US2085200 A, FR2408530 A1, FR2322057 A1, FR2074598 A1, DE629289 A,

Forward Citations: US4557397, US4496048, JP1266331, DE102013104226, DE102013104226,

Abstract:
Source: US4383621A A pull tab for an easy opening can for tearing a pull panel to separate the panel from the can end. The tab is attached to the pull panel by an integral strap which is spirally wound to encircle the anterior portion. The spiral feature provides high shearing stress at the initiation of panel opening and then a flexible connection with the removable panel during continued opening to panel removal.

0) US4026226A – PRESS APPARATUS AND METHOD UTILIZING SAME

117) Family number: 31050995 (US4026226A) © PatBase

Title: Press apparatus and method utilizing same

Priority: JP19760178836U 19761228 US19760662905 19760301 US19760662906 19760103 US19780883174 19780303 US19770764213 19770131

Family:

Publication number	Publication date	Application number	Application date
AU197619132 A1	19780504	AU19760019132	19761029
AU197722146 A1	19780817	AU19770022146	19770210
AU502588 B2	19790802	AU19770022146	19770210
FR2337085 A1	19770729	FR19760039739	19761231
FR2337085 B3	19801107	FR19760039739	19761231
GB1531169 A	19781101	GB19760053753	19761223
GB1531170 A	19781101	GB19770037490	19761223
IT1115838 A	19860210	IT19770048252	19770301
JP52116471 U1	19770903	JP19760178836U	19761228
JP52117686 U1	19770906	JP19770004257U	19770119
JP57053217 Y1	19821118	JP19760178836U	19761228
JP57053217 Y2	19821118	JP19760178836U	19761228
JP59008877 Y2	19840319	JP19770004257U	19770119
US4026226 A	19770531	US19760662905	19760301
US4166424 A	19790904	US19780883174	19780303

Probable Assignee: AMERICAN NATIONAL CAN CO

Assignee(s):(std)**:** AMERICAN CAN CO ; AMERICAN CAN COMPANY ; AMERICAN CAN CY

Assignee(s): AMERICAN CAN PACKAGING INC ; AMERICAN NATIONAL CAN CO ; AMERICAN CAN

Inventor(s):(std)**:** ALBERT J MALMSTROM ; JA ROBERT ; KL HAHN ; KURT L HAHN ; ROBERT J ALLEN ; ROBERT J A ; HAHN K L ; MALMSTROM ALBERT J ; HAHN KURT L ; ALLEN ROBERT J

Inventor(s): K L HAHN ; J A ROBERT

International class (IPC 8–9)**:** B21D28/02 B21D43/16 B21D51/38 B21D51/44 B26D5/20 B30B13/00 B30B7/00 B65D17/28 B65D17/32 B65D53/06 (Advanced/Invention); B21D28/02 B21D43/02 B21D51/38 B26D5/20 B30B13/00 B30B7/00 B65D17/28 B65D53/00 (Core/Invention)

International class (IPC 1–7)**:** B21D28/02 B21D43/05 B21D43/16 B21D51/44 B30B13/00 B30B15/30 B30B7/00 B30B7/02 B30B7/04 B65D17/00 B65D17/16 B65D17/24 B65D17/28 B65D53/06 B65D7/34 B65G59/06

CPC: B65D17/161 B65D2205/00 B21D43/16 B21D51/383

European class: B21D43/16 B21D51/38B B65D17/16B L65D205/00

US class: 113/114BE 221/268 413/12 413/14 413/25 413/49 413/66 413/8 72/405.06 72/455

Classification Explorer

Cited documents: US4019452 A, US3702103 A, US3683834 A, US3550546 A, US3528575 A, US3369387 A, US3128731 A, US3011464 A, US2869177 A, US2675117 A, US2386845 A, US2332531 A, US2297730 A, US1784745 A, US1754463 A, US1750391 A, US1133383 A, US1131974 A, US1013344 A, JP48071065 U1, JP47029957 A2,

Forward Citations: WO06017953, USRE33061, US9242289, US7779985, US7431064, US7344347, US7331281, US7237999, US7237998, US7234907, US7063492, US7063492, US6802683, US6533518, US6390749, US6386814, US6170309, US6022179, US5967740, US5660516, US5611235, US5511920, US5102278, US5067341, US5017072, US4932822, US4862722, US4799846, US4760729, US4723882, US4627265, US4599884, US4567746, US4454743, US4416133, US4382737,

US4380857, US4305268, US4238950, US4210091, US4208976, US2012082529, US2008267736, US2007258803, US2007186588, US2006180035, US2003053890, KR101285035, JP62168621, JP2016517353, FR2602166, FR2516445, EP1986802, EP1986802, EP1291126, EP0941830, EP0542310, EP0416453, EP0351158, EP0281777, EP0161651, EP0149185, EP0105726, DE3744956, DE3736513, DE3627179, DE3510105, DE10066014, DE10066012, AU575647,

Abstract:
Source: US4026226A An inverted conversion press for producing easy−open metal container ends is provided, which combines the functions of end and tab presses. The press includes a tab forming station and an end forming station, disposed one beneath the other and rendered alternately operative by a vertically−reciprocable slide assembly. A method for producing an article, comprised of assembled workpieces, is also provided.

0) US2010015646A – PORTABLE, POINT–OF–CARE, USER–INITIATED FLUIDIC...

118) Family number: 44247023 (US2010015646A) © PatBase

Title: PORTABLE, POINT–OF–CARE, USER–INITIATED FLUIDIC ASSAY METHODS AND SYSTEMS

Priority: US20080228081 20080716 US20090253356P 20091020 US20090253383P 20091020 US20090253377P 20091020 US20090253373P 20091020 US20090253365P 20091020 US20090266019P 20091202 US20100959140 20101202 US20100908815 20101020 US20100908750 20101020 US20100908829 20101020 US20100908803 20101020 US20100908822 20101020 US20110209878 20110815 WO2009US50775 20090716 WO2010US53444 20101020

Family:

Publication number	Publication date	Application number	Application date
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EP2313786 A4	20110831	EP20090798730	20090716
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JP2011528441 T2	20111117	JP20110518899T	20090716
US2010015646 AA	20100121	US20080228081	20080716
US2011117673 AA	20110519	US20100959140	20101202
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US2011151486 AA	20110623	US20100908803	20101020
US2011152720 AA	20110623	US20100908822	20101020
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US8846310 BB	20140930	US20110209878	20110815
WO10009283 A1	20100121	WO2009US50775	20090716

Probable Assignee: BOSTON MICROFLUIDICS

Assignee(s):(std)**:** BOSTON MICROFLUIDICS ; CHRISTIAN KATE E ; JOHNSON BRANDON T ; VOGLER DAVID A ; ZAPPIA THOMAS M ; ZAPPIA TOM

Inventor(s):(std)**:** BUTZ DAVID ; CHRISTIAN KATE ; CHRISTIAN KATE E ; JOHNSON BRANDON T ; VOGLER DAVID ; VOGLER DAVID A ; VOLGER DAVID A ; ZAPPIA THOMAS M ; ZAPPIA TOM

Agent(s): MBM INTELLECTUAL PROPERTY LAW LLP; CROSS JAMES PETER ARCHIBALD; GARRETT IP LLC C O CPA GLOBAL; GARRETT IP LLC; GARRETT IP; GARRETT PATRICK E

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A61B10/00 A61B5/151 A61B5/157 B01D35/00 B01J19/00 C12M1/00 C12M1/34 C12Q1/70 G01N1/00 G01N30/00 G01N33/48 G01N33/53 G01N33/543 G01N33/558 G01N33/566 G01N33/569 G01N35/00 G01N35/08 (Advanced/Invention); C12M1/34 G01N33/53 G01N35/00 (Core/Invention)

CPC: B01L3/50273 A61B10/0038 A61B10/0051 A61B10/007 B01L3/5025 B01L3/502723 B01L3/5029 B01L2200/0684 B01L2200/0689 B01L2200/10 B01L2300/043 B01L2300/045 B01L2300/0672 B01L2300/0681 B01L2300/0816 B01L2300/0832 B01L2300/0867 G01N33/558 A61B10/0045 B01L3/502 B01L2300/0636 B01L2400/0478 G01N33/54366 Y10T436/25375

European class:

A61B10/00L B01L3/00C6 B01L3/00C6M6 B01L3/00C6M8 B01L3/502 B01L3/5027C B01L3/5027D G01N33/543K G01N33/558 K61B10/00F K61B10/00L2 K61B10/00L8 L01L200/06M L01L200/06N L01L200/10 L01L3/5025 L01L3/5029 L01L300/04A4 L01L300/04A8 L01L300/06B2 L01L300/06C L01L300/06D L01L300/08B4 L01L300/08C L01L300/08E4 L01L400/04M2

US class: 422/400 422/400S 422/500 422/500S 422/535 422/535S 422/63 422/63S 422/68.1 422/68.100S 422/69 422/69S 427/2.11 427/8 435/283.1 435/283.100S 435/287.1 435/287.2 435/287.200S 435/288.5 435/4 435/5 435/5P 435/7.1 435/7.100S 435/7.92 435/7.920P 436/177 436/177S 436/501 436/501S 436/518 436/518P 600/309 600/309S 600/583 600/583P

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Cited documents: WO9939298 A1, WO11050110 A1, WO10009283 A1, WO07065695 A1, WO0141930 A1, US8021873 BB, US7531362 BB, US7517495 BB, US7381375 BB, US7358079 BB, US7311195 BB, US7303925 BB, US7300750 BB, US7270970 BB, US7238322 BB, US7157234 BB, US7132078 BB, US7100639 BB, US7090802 BA, US7018830 BB, US6893816 BA, US6833111 BB, US6827899 BB, US6737278 BA, US6623955 BB, US6503702 BA, US6488894 BA, US6312888 BA, US6300142 BA, US6300140 BA, US6120733 A, US6079871 A, US6077660 A, US5866356 A, US5824268 A, US5817522 A, US5766961 A, US5750184 A, US5731162 A, US5704501 A, US5552320 A, US5516638 A, US5418167 A, US5415994 A, US5391478 A, US5288463 A, US5270069 A, US5183740 A, US5152965 A, US5143084 A, US5024238 A, US4732850 A, US4729875 A, US4637061 A, US4582685 A, US4580682 A, US4515753 A, US4308347 A, US4277560 A, US4162003 A, US3986834 A, US3733179 A, US3684455 A, US3579306 A, US2012201726 AA, US2011152720 AA, US2011151486 AA, US2011151432 AA, US2011143335 AA, US2011124129 AA, US2011117673 AA, US2010015646 AA, US2009215194 AA, US2009215159 AA, US2009176316 AA, US2009123336 AA, US2008217246 AA, US2008041738 AA, US2007299390 AA, US2006275852 AA, US2004079425 AA, US2004031488 AA, US2003049857 AA, US2002123059 AA, JPS6361164, JP63061164 A2, JP2005043190 A2,

Forward Citations: WO14074773, WO12103511, WO12103511, WO12078863, WO12078863, US9625465, US9606118, US9557330, US9475049, US9434977, US9347938, US9341624, US9213043, US9199236, US9132426, US9081001, US9075042, US8974399, US8846310, US8476082, US2014336488, US2013171044, US2012282681, US2011300563, US2011151432, US2011117673, JP2013524230,

Abstract:
Source: US2010015646A Methods and systems to perform point−of−care, user−initiated fluidic assays, using substantially self−contained, portable, user−initiated fluidic assay systems. Exemplary assays include diagnostic assays and chemical detection assays. Diagnostic assays may include, without limitation, enzyme−linked immuno−sorbent assays (ELISA), and may include one or more sexually transmitted disease (STD) diagnostic assays. An exemplary assay system includes a housing having one or more fluid chambers, a fluid controller system to dispense fluid from the one or more fluid chambers, and a user−initiated actuator to control the fluid controller system. The actuator may be configured to move fluid controllers from functionally closed positions to functionally open positions, to control fluid flow from the fluid chambers. The fluid controller system may be configured to dispense fluids serially, and may be configured to mix a plurality of fluids. The housing may include one or more fluid paths amongst the fluid chambers and/or between the fluid chambers and an assay portion, and the fluid controller system may be configured to serially align fluid chamber outlets with corresponding fluid paths. The user−initiated actuator system may include an external user−operated trigger mechanism to initiate the actuator system. The actuator system may include a mechanical actuator system, and may include a compressible spring actuator system. The assay apparatus may include a display window to view assay results. Exemplary methods of preparing portable, user−initiated fluidic assay systems, and methods of using portable, user−initiated fluidic assay systems are disclosed.

0) US3923193A – EASY–OPEN CONTAINER WITH NONDETACHABLE LOCK–IN ...

119) Family number: 1205591 (US3923193A) © PatBase

Title: Easy–open container with nondetachable lock–in tab

Priority: US19730366586 19730613 US19750546738 19750203

Family:

Publication number	Publication date	Application number	Application date
US3923193 A	19751202	US19750546738	19750203

Probable Assignee: WELLS VERA T

Assignee(s):(std)**:** STROBE CARL J ; WELLS ROBERT A

Assignee(s): WELLS VERA T ; WELLS VERA T DENVER CO

Inventor(s):(std)**:** STROBE CARL J ; WELLS ROBERT A

International class (IPC 8–9): B65D17/32 B65D41/32 (Advanced/Invention); B65D17/28 B65D41/32 (Core/Invention)

International class (IPC 1–7): B65D17/32 B65D41/32

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/269 220/712

Classification Explorer

Cited documents: US3860143 A, US3738526 A, US3717279 A, US3653535 A,

Forward Citations: WO9512526, WO9014280, WO12134508, WO12134508, US5147057, US5090584, US4915290, US4561557, US4363419, US4247014, US4184605, US4096967, US4073403, US2010224628, US2010213194, US2003213803, FR2393733, DE3204974, DE2819468,

Abstract:
Source: US3923193A An easy–open container having an opening tab which, when opened, remains attached to the container and is disposed within the opening of the container. An opening tab is defined in the container in part by a tearaway region and in part by a non–tearing region. The opening tab has a portion which is selectively deformable with respect to the remainder of the opening tab, and a handle is attached to the opening tab for the selective application of force tending to deform the tab portion inwardly of the container to initiate opening of the container. The handle is configured to be substantially completely receivable within the opening as the remaining tearaway portion of the opening tab is torn away and the tab is bent inwardly about the bending region, so that both the opening tab and the handle are substantially disposed within the container. The opening tab and the handle are retained within the opened container.

0) FR1521273A – PERFECTIONNEMENTS AUX BOITES A OUVERTURE RAPIDE...

120) Family number: 21669864 (FR1521273A) © PatBase

Title: PERFECTIONNEMENTS AUX BOITES A OUVERTURE RAPIDE IMPROVEMENTS ON BOXES QUICK OPENING (Machine translation)

Priority: FR19670104837 19670502

Family:

Publication number	Publication date	Application number	Application date
FR1521273 A	19680412	FR19670104837	19670502

Probable Assignee: CONTINENTAL CAN CO

Assignee(s):(std): CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC

International class (IPC 8–9): B65D17/50 (Advanced/Invention); B65D17/00 (Core/Invention)

International class (IPC 1–7): B65D17/06

CPC: B65D17/506

European class: B65D17/50B

Classification Explorer

Forward Citations: FR2398670, FR2175856,

Abstract:
Source: FR1521273A [Source: Claim 1] 1. Ladite ouverture est delimitee par une bordure peripherique alignee avec ladite ligne d'affaiblissement pour faciliter l'arrachement 'dudit panneau de fermeture le long de cette ligne, une bordure faisant saillie a l'exterieur separant ladite ouverture dudit siege de la patte de traction et est situee dans la surface interieure dudit element de panneau; m. Lesdites parties de panneau comportent des prolongements disposes le long de ladite patte de traction et qui sont scelles au siege de ladite patte; n. Lesdites parties de panneau ont des prolongements disposes le long de ladite patte de traction et qui sont unis au siege de cette patte, des perforations resistantes a l'arrachement percees dans ledit panneau de boite, aux coins de ladite ouverture, etant situees sous, et etant unis par, lesdits prolongements; o. Ladite ouverture est delimitee par une bordure peripherique alignee avec ladite ligne d'affaiblissement pour faciliter l'arrachement dudit panneau de fermeture le long de cette ligne, une bordure qui fait saillie a l'exterieur separant ladite ouverture du siege de la patte de traction et est situee dans la surface interieure dudit element de panneau. 3 Une extremite de boite a ouverture rapide qui comprend un panneau d'extremite, une ouverture preformee dans ledit panneau d'extremite delimitee par une bordure s'etendant tout autour de ladite ouverture et delimitant un siege tourne axialement vers l'interieur, un panneau de matiere plastique lie audit panneau d'extremite le long dudit siege, une ligne d'affaiblissement dans ledit panneau d'extremite delimitant une partie de panneau enlevable dimensionnee pour etre tiree axialement a travers ladite ouverture du panneau d'extremite, une patte de traction surjacente audit panneau d'extremite et s'avancant de facon a s'etendre partiellement audessus de ladite partie de panneau enlevable, et des moyens fixant de facon permanente ladite patte de traction a ladite partie de panneau enlevable; 4 Des modes de realisation d'une boite selon 30 remarquables en outre par les caracteristiqus suivantes prises isolement ou en combinaisons: a. Ladite bordure comprend une bordure peripherique s'etendant axialement a l'interieur et qui est encastree dans la surface exterieure dudit panneau de matiere plastique, cette bordure peripherique etant alignee avec ladite ligne d'affaiblissement; b. La face inferieure dudit panneau d'extremite comporte un revetement de protection et ledit panneau de matiere plastique est directement soude a chaud a celui–ci; c. Les moyens pour fixer de facon permanente ladite patte de traction audit panneau de matiere plastique sont constitues par un rivet faisant partie integrante dudit panneau de matiere plastique, ledit rivet etant dispose au centre dudit panneau d'extremite, ladite ouverture ayant un contour generai trapezoidal avec des extremites arrondies. [Source: Claim 1] 1. Said opening is bounded by a peripheral edge aligned with said line of weakness to facilitate tearing 'of said closure panel along the line, an edge projecting on the outside separating said opening of said seat of the pull tab and is situated in the inner surface of said panel element; m. Said panel portions comprise extensions which run the length of said pull tab and which are sealed at the seat of said tab; not. Said panel extensions willing parties along said pull tab and are united at the headquarters of the paw of a resistant perforations tear breakthroughs in said box panel, the corners of said opening being LOCATED under, and being united, said extensions; o. Said opening is bounded by a peripheral edge ALIGNED with said weakening line to facilitate tearing of said closure panel along this line, an edge that protrudes on the outside separating said opening of the headquarters of the pull tab and is situated in the inner surface of the panel element. 3 A box was fast extremity opening that includes an extremity panel, a preformed opening in said extremity panel bounded by a border is extending all around said opening and delimiting a seat rotates axially towards the inside, a panel of plastic material binds to said end panel along said seat, a line of weakness in said panel end defining a removable panel portion sized to be drawn axially through said opening of the end panel, a

pull tab overlying said panel extremity and he stepped on a way to partially extend above said part of removable panel, and means securing permanent way said pull tab has said part of removable panel; 4 Some embodiments of a box according to 30 further remarkable by the following design is prerequisite taken singly or in combination: a. Said rim includes a peripheral edge extending axially inside and which is embedded in the outer surface of said plastic panel, said peripheral edge being aligned with said weakening line; b. The lower extremity face of said panel has a coating of protective material and said plastic panel is directly soda hot has it; c. The means for securing permanent way said pull tab audit panel plastic material are constituted by a rivet forming an integral part of the said plastic material panel, said rivet being has the center of said extremity of the panel, said opening having an outline with trapezoidal generaI rounded ends.

0) US2004040618A – FOOD STORAGE CONTAINERS

121) Family number: 29935126 (US2004040618A) © PatBase

Title: FOOD STORAGE CONTAINERS

Priority:

DE20001060995	20001208	DE20001060996	20001208	DE20001060998	20001208
DE20001060999	20001208	EP20030757710	20031016	DE20015003676	20011114
DE20015009182	20011114	DE20015009185	20011115	US20040882520	20040701
US20030457285	20030609	US20030457319	20030609	DE20021030748	20020709
US20040882551	20040701	WO2003DE03430	20031016	WO2001EP13148	20011114
WO2001EP13233	20011115	WO2002EP14693	20021221	WO2001EP13234	20011115
WO2001EP13147	20011114				

Family:

Publication number	Publication date	Application number	Application date
AT276137 E	20041015	AT20010982485T	20011114
AT319628 E	20060315	AT20010995635T	20011115
AT319631 E	20060315	AT20010990412T	20011114
AT354521 E	20070315	AT20030757710T	20031016
AU200214052 A5	20020618	AU20020014052	20011114
AU2002214052 AA	20020618	AU20020214052	20011114
AU2002214052 BB	20040819	AU20020214052	20011114
AU2002214052 CA	20061207	AU20020214052	20011114
AU2002217034 AA	20020618	AU20020217034	20011115
AU2002226336 AA	20020618	AU20020226336	20011115
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BRPI0115272 B1	20090811	BR2001PI15272	20011114
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DE10060999 C1	20020103	DE20001060999	20001208
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DE50103676 D1	20041021	DE20015003676	20011114
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DE50109185 D1	20060504	DE20015009185	20011115
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WO04005159 A1	20040115	WO2002EP14693	20021221	
WO05044667 A1	20050519	WO2003DE03430	20031016	

Probable Assignee: BRAUN GMBH

Assignee(s):(std)**:** BRAUN GMBH ; BRAUN GMBKH ; CORONADO JUAN CARLOS ; FRANKE HELMUT ; GILI SERGI ; VILALTA MONTSERRAT ; MILLAN JOSE ; PENARANDA MARIANO ; REBORDOSA ANTONIO ; RAFOLS ROBERT ; VORBECK WOLFGANG ; HERNANDEZ ALEJANDRO

Inventor(s):(std)**:** MILLAN JOSE ; PENARANDA MARIANO ; REBORDOSA ANTONIO ; VILALTA MONTSERRAT ; VORBECK WOLFGANG ; VILALTA M ; SERGI GILI ; RAFOLS ROBERT ; MONTSERRAT VILALTA ; MILLAN KHOSE ; MILLAN J ; MARIANO PENARANDA ; M VILALTA ; KORONADO KHUAN KARLOS ; JUAN CAROLOS CORONADO ; JUAN CARLOS CORONADO ; JOSE MILLAN ; JC CORONADO ; J MILLAN ; HERNANDEZ ALEJANDRO ; GILI SERGI ; FRANKE HELMUT ; CORONADO M VILALTA J MILLAN J ; CORONADO JUAN CAROLOS ; CORONADO JUAN CARLOS ; CORONADO J C ; ANTONIO REBORDOSA ; VIALTA MONTSERRAT

Inventor(s): PEARANDA MARIANO ; ALEJANDRO HERNANDEZ ; J C CORONADO ; CORONADO JUAN ; HELMUT FRANKE ; M VILALTA J MILLAN JC CORONADO ; M VILALTA J MILLAN J C CORONADO ; ROBERT RAFOLS ; WOLFGANG VORBECK

Agent(s):

DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; MACRAE AND CO; FISH AND RICHARDSON PC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A23L3/3418 A47J43/00 A47J43/04 B65B1/04 B65B31/04 B65B39/00 B65D1/00 B65D51/16 B65D79/00 B65D79/02 B65D81/20 F04C18/344 F04C23/00 F04C23/02 F04C25/02 F04C29/00 G01L7/08 (Advanced/Invention); B65B31/04 B65D31/04 (Advanced/Non–invention); A23L3/34 A47J43/00 A47J43/04 B65B1/04 B65B31/04 B65D51/16 B65D79/00 B65D81/20 F04C18/34 F04C23/00 F04C25/00 F04C29/00 (Core/Invention)

International class (IPC 1–7): A23L3/3418 A47J A47J43/07 B65B B65B B65B031/04 B65B31/00 B65B31/04 B65D B65D41/56 B65D51/16 B65D51/24 B65D51/26 B65D51/28 B65D51/30 B65D51/32 B65D79/00 B65D79/02 B65D81/20 F04C18/344 F04C23/00 F04C23/02 F04C25/02

CPC: B65D79/02 B65B31/047 F04C18/3442 F04C29/0071 F04C2220/10 B65D51/1683 B65D79/005 B65D81/2015 B65D81/2038 B65D2203/12

European class: B65B31/04E1 B65D51/16E2 B65D79/00B B65D79/02 B65D81/20B1 B65D81/20B3 F04C18/344B2 F04C29/00D2F L65D203/12 R04C220/10

US class: 116/270 141/325 141/326 141/65 141/8 206/524.8 215/230 215/260 215/262 220/203.05 220/203.11 220/203.16 220/203.23 220/212 220/231 220/254.3 220/367.1 99/472

Classification Explorer

Cited documents: WO9717259 A1, WO9607590 A1, WO9108151 A1, WO8800560 A1, WO0246057 A1, US6799506 BB, US6799506 BA, US5974686 A, US5955127 A, US5806703 A, US5803282 A, US5779082 A, US5762282 A, US5762228 A, US5735317 A, US5465857 A, US5279550 A, US5277876 A, US5195427 A, US5137424 A, US4838772 A, US4793717 A, US4778072 A, US4674642 A, US4051971 A, US4016999 A, US3737066 A, US3241514 A, US2655894 A, US2634014 A, US2130180 A, US2004173105 AA, RU2089087 C1, JP7277374 A2, GB2317882 A1, FR2692870 A1, FR2235064 A2, EP0820999 A1, EP0820939 A1, EP0644128 A1, EP0633196 A2, EP0510360 A1, EP0234607 B1, EP0234607 A1, DE8321236 U, DE8321236, DE7409380 U, DE7409380, DE4342394 C1, DE4342394 A1, DE4334250 A1, DE4306171 A1, DE4136150 A1, DE29920316 U1, DE29920316, DE29920316, DE2992031, DE2821852 A1, DE19504638 A1, DE10060999 C1, DE10060998 C1, DE10060996 C1, CH304374 A, CH304374,

Forward Citations: WO15062744, WO15018645, WO11118886, WO10102044, WO10053441, WO09042844, WO08112093, WO07106676, WO06043733, WO05047112, WO05044667, WO04090213, WO04005159, WO03068607, WO03068607, USD772640, USD772002, USD771998, USD771997, USD771432, USD771431, USD675057, USD673808, USD673807, USD615347, USD574485, US9663276, US9624013, US9615689, US9375537, US9359121, US9296467, US9265881, US9242782, US9187223, US9108788, US9085389, US8967413, US8966869, US8833591, US8827556, US8757053, US8733550, US8667768, US8662334, US8430259, US8419279, US8362404, US8348107, US8276776, US8251340, US8240112, US8231273, US8192182, US8176604, US8113246, US8096329, US7967509, US7946766, US7887238, US7886412, US7874731, US7857515, US7857514, US7784160, US7726880, US7621416, US7597479, US7578320, US7389629, US7328730, US7290660, US7131550, US7096893, US6994227, US2016288966, US2015105724, US2015105720, US2015047741, US2013196039, US2013139472, US2012266570, US2012195529, US2012193257, US2012125931, US2012018432, US2011278278, US2011203944, US2010218461, US2010200588, US2010175850, US2010102058, US2010084307, US2010075001, US2009250465, US2009199724, US2009110777, US2009101535, US2008308177, US2008241441, US2008085347, US2008028730, US2007209326, US2007175896, US2006227492, US2006159576, US2004232026, US2004155041, KR100969703, KR100853752, EP2403775, EP1616984, EP1323643, DE202004005887, DE10348119, DE10317310, DE10230748, CN105492847,

Abstract:
Source: US2004040618A A food storage container includes a lid with a vent hole, and a removable cover removably secured to the lid to cover the vent hole. The cover has an evacuation hole. The food storage container further includes a one–way air valve disposed between the vent hole and evacuation hole. With the cover secured to the lid, the one–way air valve inhibits air flow into the container through the vent hole while allowing air flow out of the container via the vent hole and evacuation hole. With the cover removed, the one–way air valve allows bi–directional air flow through the vent hole. An outer surface of the cover defines a smooth sealing area extending about the evacuation hole for sealing against a vacuum pump held against the cover over the evacuation hole to evacuate the container.

0) US3952913A – TAB ANTI–ROTATION AND HOLD DOWN DEVICE

122) Family number: 1278479 (US3952913A) © PatBase

Title: Tab anti–rotation and hold down device

Priority: US19740524681 19741118

Family:

Publication number	Publication date	Application number	Application date
CA1018088 A1	19770927	CA19750225788	19750429
CH588386 A	19770531	CH19750004862	19750416
US3952913 A	19760427	US19740524681	19741118
ZA7501665 A	19761027	ZA19750001665	19750318

Probable Assignee: CONTINENTAL CAN CO

Assignee(s):(std)**:** CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC ; KHOURY NICK S

Inventor(s):(std)**:** KHOURY N ; KHOURY NICK S

International class (IPC 8–9)**:** B65D41/32 (Advanced/Invention); B65D41/32 (Core/Invention); B65D (Subclass/Invention)

International class (IPC 1–7)**:** B65D17/24 B65D41/32

CPC: B65D17/163

European class: B65D17/16B1

US class: 220/273

Classification Explorer

Cited documents: US3869063 A, US3724709 A,

Forward Citations: US7866501, US2005196252, EP0027340,

Abstract:
Source: US3952913A An improved pull tab mounting arrangement for an easy open end closure member, characterized by the provision of improved pull tab positioning means for maintaining the pull tab in a desired orientation relative to the panel–defining score line and minimizing tab protrusion from the end closure member. A depression is formed in the end panel and a pierced hole forming a protrusion with a jagged edge is incorporated in the tab nose portion above the depression, between the free extremity of the tab and the rivet means that secures the tab to the end panel member. The jagged protruding edge of the protrusion is driven into the base portion of the depression during the staking operation, thereby providing an anti–rotation interlock between the tab and the end panel. The depression serves as a detent positively restraining rotation of the tab and displacement of the nose relative to the score line. The protrusion, whose length exceeds the depth of the depression, further serves to raise the nose portion of the tab relative to the end panel thereby biasing the tab against the end panel upon staking of the rivet which forces the finger grip portion of the tab into close contact with the end panel.

0) US4957216A – ANCHOR FOR PLASTIC CAP

123) Family number: 4245670 (US4957216A) © PatBase

Title: Anchor for plastic cap

Priority: US19890338580 19890417

Family:

Publication number	Publication date	Application number	Application date
US4957216 A	19900918	US19890338580	19890417

Probable Assignee: ALUMINUM CO OF AMERICA

Assignee(s):(std)**:** ALUMINUM CO OF AMERICA

Assignee(s): ALUMINUM COMPANY OF AMERICA ; ALUMINUM CO

Inventor(s):(std)**:** LABARGE ROBERT L

International class (IPC 8–9): B65D17/50 B65D55/16 (Advanced/Invention); B65D17/00 B65D55/00 (Core/Invention)

International class (IPC 1–7): B65D55/00

CPC: B65D17/166 B65D17/506

European class: B65D17/16B2B B65D17/50B

US class: 220/379 220/744 220/85CH

Classification Explorer

Cited documents: US4793510 A, US4783985 A, US4685849 A, US4678096 A, US4673099 A, US4648528 A, US4442950 A, US4345696 A, US4339053 A, US4148410 A, US4039101 A, US4024981 A, US3997076 A, US3977341 A, US3946683 A, US3938455 A, US3929251 A, US3912114 A, US3902626 A, US3807597 A, US2033042 A,

Forward Citations: USD747649, USD747199, US8857644, US6571975, US5148935, US5121851, US2010133275,

Abstract:
Source: US4957216A This invention relates to an improved can end construction for beverage cans having a score line defined panel therein for beverage dispensing and, more particularly, to an improved can end construction for releasably positioning a displaceable resealing cap assembly at a predetermined location on a container end closure.

0) US4938070A – CAN LID TESTER AND METHOD OF USE THEREOF

124) Family number: 3499127 (US4938070A) © PatBase

Title: Can lid tester and method of use thereof

Priority: US19890332233 19890331

Family:

Publication number	Publication date	Application number	Application date
US4938070 A	19900703	US19890332233	19890331

Probable Assignee: J P MANUFACTURING CO

Assignee(s):(std)**:** J P MANUFACTURING CO ; J P MFG CO

Assignee(s): J P MFG

Inventor(s):(std)**:** LAMPING ROBERT F ; PESSINA ROBERT J

International class (IPC 8–9)**:** G01L5/00 (Advanced/Invention); G01L5/00 (Core/Invention)

International class (IPC 1–7)**:** G01N3/08

CPC: G01L5/0033

European class: G01L5/00D2

US class: 73/835

Classification Explorer

Cited documents: US4850230 A, US2819804 A,

Forward Citations: US5092154, US5086653,

Abstract:
Source: US4938070A A device which will automatically remove a lid from a stack of lids designated for testing, feed the selected lid to a testing position, orient the selected lid so that the easy−open feature is in the desired position, test the easy−open feature by engaging the tab located on the scored segment of the lid with a lifting finger and causing the lifting finger to activate the tab in the manner which a consumer would use by rotating the tab through an arc of at least ninety degrees, and then eject the tested lid from the device.

0) US2014325943A – BEVERAGE CONTAINER WITH MOUTH OPENING AND VENT ...

125) Family number: 57710197 (US2014325943A) © PatBase

Title: BEVERAGE CONTAINER WITH MOUTH OPENING AND VENT

Priority: US20130874767 20130501

Family:

Publication number	Publication date	Application number	Application date
US2014325943 AA	20141106	US20130874767	20130501

Probable Assignee: FESLER LANCE

Assignee(s):(std)**:** FESLER LANCE

Inventor(s):(std)**:** FESLER LANCE

International class (IPC 8–9)**:** B65D17/00 (Advanced/Invention)

CPC: B65D17/161 B65D17/165 B65D2517/0014 B65D2517/0094

US class: 220/271 53/492

Classification Explorer

Forward Citations: USD762114, US9446879,

Abstract:
Source: US2014325943A A container lid (10) includes a conventional main or pour opening, a vent opening separate from the main opening, and a mechanically attached tab (50) to create the openings. A vent score (40) defines the shape of the vent opening, and a vent panel (38) covers the vent opening. A mouth score (26) defines the shape of the pour opening, and a mouth panel (28) covers the pour opening. The action of creating the main opening using the tab (50) causes a moustache score (46) to break and create a vent opening in the same action. When the tab is returned to its original orientation the vent opening may be further enlarged by engaging a raised section on the vent panel (42) and the tab (50), by engaging a vent depressing means (44) on the tab (50) to the vent panel (38), or a combination of the two.

0) FR1486421A – APPAREIL POUR LE FORAGE DU SOL APPARATUS FOR D...

126) Family number: 21012632 (FR1486421A) © PatBase

Title:	APPAREIL POUR LE FORAGE DU SOL APPARATUS FOR DRILLING GROUND (Machine translation)
Priority:	FR19660061696 19660516

Family:

Publication number	Publication date	Application number	Application date
FR1486421 A	19670630	FR19660061696	19660516

Probable Assignee:	DRILCO OIL TOOLS
Assignee(s):(std):	DRILCO OIL TOOLS
Assignee(s):	DRILCO OIL TOOLS INC
International class (IPC 8–9):	E21B7/06 E21B7/08 (Advanced/Invention); E21B7/04 (Core/Invention)
CPC:	E21B7/062
European class:	E21B7/06C

Classification Explorer

Forward Citations: US5131479, FR2659383, FR2484521, EP0456526,

Abstract:
Source: FR1486421A [Source: Claim 1] 1.RESUME I. Appareil permettant un forage dirige, compor tant un corps creux muni d'organes pour son rac cordement a un trepan a une extremite et a une co lonne de tiges a l'autre extremite, une chemise directrice plus courte que ce corps, montee a rota tion sur celui–ci et pouvant se deplacer longitudi– nalement par rapport a lui a partir d'une position dans laquelle cette chemise est plus rapprochee du raccord relie au trepan que du raccord relie a la colonne de tiges, jusqu'a une position dans la– quelle elle est plus rapprochee du raccord relie a la colonne de tiges que du raccord relie au trepan, en passant par une gamme de positions interme diaires entre ces deux positions limites, des organes d'etancheite delimitant une chambre pouvant etre mise sous pression entre la chemise et le corps, des organes transferant le fluide sous pression depuis l'interieur du corps jusque dans cette chambre, ces organes d'etancheite etant ecartes longitudina lement de part et d'autre des organes de transmis sion de la pression dans toutes les positions rela tives du corps et de la chemise, des organes coope rant avec la paroi du puits, pouvant faire saillie par rapport a la chemise quand une pression est exercee dans la chambre depuis l'interieur du corps, afin de cooperer avec cette paroi du puits et de maintenir cette chemise dans une position desiree par rapport a ladite paroi, tandis que le corps est deplace axialement a travers elle entre la position dans laquelle cette chemise est plus rapprochee du raccord relie au trepan et la position dans la– quelle ladite chemise est plus rapprochee du rac cord relie a la colonne de tiges, et des organes de verrouillage degageabies, maintenant la chemise dans cette position sur le corps, cette chemise etant alors plus rapprochee du raccord relie au trepan que du raccord relie a la colonne de tiges, jusqu'a ce que ces organes de verrouillage soient degages, lesdits organes de verrouillage degageabies comprenant un ergot pouvant cooperer avec un logement, prevus sur le corps et sur la chemise, afin d'empecher un deplacement axial relatif de ces deux elements quand l'ergot est engage dans ce logement. II. Modes de realisation de cet appareil, presen tant les particularites suivantes, considerees sepa rement ou collectivement 10 Le systeme de verrouillage par ergot et loge ment comprend un premier ergot prevu a l'extre mite inferieure de la chemise, presentant une em base s'etendant vers le bas depuis l'extremite infe rieure de cette chemise et un bec s'etendant circon– ferentieueement a partir de cette embase, en mena geant un logement en forme de fente entre l'extre mite inferieure de la chemise et ce bec de l'ergot, et un second ergot prevu a l'extremite inferieure du corps, comprenant une embase s'etendant vers le haut a partir de cette extremite inferieure du corps et un bec s'etendant circonferentieilement a partir de cette embase du second ergot, dans une direction opposee a la direction du bec du premier ergot, en menageant un logement en forme de fente entre l'extremite inferieure du corps et ce bec du second ergot; 20 Des organes de commande reagissent a une pression de fluide regnant dans ce corps pour com mander le dispositif de verrouillage, ces organes de commande reagissant a la pression de fluide a l'interieur du corps pour degager ce dispositif de verrouillage en meme temps que les organes pouvant faire saillie a partir de la chemise sont deplaces pour venir s'appliquer contre la paroi du puits en reponse a cette pression de fluide regnant dans le corps; 30 Le dispositif de commande comprend un piston monte de facon a pouvoir se deplacer axia– iement dans le corps sous l'effet de la pression de fluide regnant dans ce corps, pour subir un depla cement dans une direction axiale donnee, et des organes elastiques sollicitant de piston dans la direc tion axiale opposee; 40 Le systeme a ergot et logement comprend un logement menage dans la chemise et un ergot monte sur le corps et pouvant subir un deplacement radiai par rapport a l'axe de ce corps, entre une position dans laquelle cet ergot s'engage dans ce logement, et une position dans laquelle ii est degage dudit logement; 50 Un organe de verrouillage est porte par le piston et peut se deplacer axialement avec lui entre une position dans laquelle ii empeche le mouvement vers l'interieur de l'ergot, ce qui maintient ainsi cet ergot en prise avec le logement, et une posi tion correspondant a une pression de fluide regnant dans le corps et dans laquelle l'organe de verrouil lage est ecarte de l'ergot, ce qui permet le depla cement de celui–ci vers l'interieur et son

degage ment par rapport au logement associe; 60 Les organes cooperant avec la paroi sont dis poses de facon asymetrique autour de la chemise par rapport a son axe, afin de solliciter le corps dans une direction predeterminee par rapport a la paroi du puits, un accouplement pouvant etre embraye dans une seule position en azimut du corps et de la chemise empechant un deplacement angu laire relatif entre eux, au moins dans une direction, cet accouplement et le dispositif de verrouillage pouvant etre enclenches en meme temps, de sorte que, lorsqu'ils sont tous deux enclenches, la che mise peut etre verrouillee sur le corps dans cette position en azimut et peut etre descendue dans un puits et deplacee anguiairement jusqu'a une posi tion en azimut desiree a l'interieur de ce puits, pour solliciter le corps dans une direction egaiement desiree; 70 La chemise est plus epaisse dans les parties dans lesquelles les organes cooperant avec la paroi du puits sont montes, le reste de cette chemise etant plus mince afin de menager un espace plus grand pour l'ecoulement du fluide dans l'espace annulaire menage entre la chemise et un puits dans lequel cette chemise est disposee; 80 Les embases des ergots comprennent des parties qui se trouvent a la meme distance radiale de l'axe du corps que les extremites des becs, et l'accouplement comprend des surfaces conjuguees prevues aux extremites de ces becs et sur le cote de chaque embase d'un ergot; 90 li comprend des cames conjuguees prevues sur la chemise et sur le corps afin de deplacer cette chemise et ce corps pour les amener dans une seule position relative en azimut lors d'un mouvement axial relatif entre eux jusqu'a une position de coo peration des cames, l'accouplement pouvant etre embraye par un deplacement axial relatif de cette chemise et de ce corps dans cette position en azi mut predeterminee, pour empecher une rotation relative de ces deux elements tout en permettant un certain debattement axial relatif jusqu'a l'en clenchement du dispositif de verrouillage; 10o Les cames comprennent un epaulement oriente vers le haut, s'etendant autour du corps, et un epaulement oriente vers le bas, s'etendant autour de l'extremite inferieure de la chemise, chacun de ces epaulements presentant une paire superieure de surfaces helicoidales droite et gauche, s'etendant chacune sur une partie de la peripherie du corps et de la chemise autour de leur axe et se rejoignant en un sommet, et une paire inferieure de surfaces helicoidales droite et gauche, s'etendant chacune sur une partie de la circonference du corps et de la chemise autour de leur axe et se rejoignant dans une depression, les epaulements des cames etant inter rompus au point de jonction des paires superieures et inferieures de surfaces helicoidales, l'accouple ment comprenant des surfaces planes s'etendant parallelement a l'axe de la chemise et du corps et rejoignant les paires superieures et inferieures de surfaces helicoidales des cames; 110 Un conge est forme dans les cames au droit de chaque depression, les surfaces helicoidales comprenant chacune une surface helicoidale droite, c'est–a–dire une surface definie geometriquement et engendree par le mouvement d'une ligne perpendi culaire a l'axe de la chemise et du corps, tournant a une vitesse constante autour de cet axe lorsque le point d'intersection avec l'axe se deplace sur ledit axe a une vitesse constante, les surfaces heli– coidales superieures s'etendant chacune sur 90 autour de cet axe, les surfaces planes de l'accou plement se trouvant toutes dans un meme plan passant par cet axe; 120 Des organes de guidage maintiennent le piston d'une maniere empechant sa rotation par rapport au corps, tout en permettant son mou vement axial, des organes d'alignement portes par le piston cooperant avec des organes d'alignement portes par le piston conjugues portes par un dis positif de controle introduit dans le corps, afin de positionner ce dispositif de controle de telle sorte qu'il occupe une position predeterminee en azimut par rapport au corps; 130 Un clapet commande i'ecouiement a travers les organes de transmission de la pression, ce clapet comprenant un element obturateur empechant l'ecou lement du fluide a travers les organes de transmis sion de la pression, cet element obturateur presen tant une partie pouvant cooperer avec un outil de repechage, de sorte que ledit element obturateur peut etre remonte au moyen d'un cable descendu dans le corps, l'element obturateur precite compor tant un canai vertical, permettant l'ecoulement du fluide a travers 3.e corps tout en empechant cet ecou lement a travers les organes de transmission de la pression; 140 Les organes d'alignement prevus sur le piston sont disposes au–dessous de l'element obturateur, au voisinage de l'extremite inferieure du corps, et cet element= obturateur a une forme tubulaire et menage un passage a travers lequel un dispositif de controle peut etre descendu afin de venir cooperer avec les organes d'alignement; 150 Un orifice s'etend a travers –la chemise a partir de la chambre devant etre mise en pression, jusqu'a l'exterieur de cette chemise, et un clapet normalement ferme commnade l'ecoulement a travers cet orifice et reagit a la pression menagee dans la chambre afin de s'ouvrir quand cette pres sion depasse une valeur predeterminee, pour pro teger l'organe d'etancheite afin d'eviter son ejec tion; 160 Ce clapet– comprend un boisseau muni de deux parties ayant des diametres exterieurs diffe rents, dispose dans 3.a chambre de la chemise et pouvant se deplacer en va–et–vient en face de cet orifice, qui est menage a la jonction entre deux parties de la chemise ayant des diametres interieurs diffe rents, des organes de support elastiques precon traints, prevus a chaque extremite du boisseau, supportant axialement ce boisseau dans une posi tion d'equilibre en face de l'orifice, des organes d'etancheite espaces axiaiement de chaque cote de l'orifice, places entre la partie de plus grand diametre du boisseau et la partie de plus grand dia metre de la chemise, et entre les parties de plus petit diametre de ce boisseau et de cette chemise, assurant l'obturation de l'orifice lorsque le boisseau occupe sa position d'equilibre, un canai d'ecoule ment prevu a travers la paroi du boisseau a une cer taine distance des organes d'etancheite prevus a chaque extremite de ce boisseau permettant le passage du fluide entre l'interieur et l'exterieur de la chemise lorsque ledit boisseau est deplace axiale ment a partir de sa position d'equilibre en reponse a l'application d'une pression sur la surface annulai re menagee entre les parties de diametres differents precitees; 170 Chacun des organes de positionnement pou vant occuper une position sortie comprend un ele ment de retenue creux muni d'une paroi externe adaptee a la forme du perimetre d'un orifice tra versant la paroi de la chemise et supporte dans une relation etanche a l'interieur de cet orifice, un or gane= de sortie elastique relie a la paroi interne de cet element de retenue, cet organe de sortie pre sentant une paroi de plus petites dimensions que l'orifice, disposee a l'interieur de cet orifice et reliee a un organe extensible, ledit organe extensible etant etudie de facon a faire saillie a partir de la chemise vers les parois d'un puits lors de l'application d'une pression depuis l'interieur de la chemise et a s'ecar ter de cette paroi en direction de la chemise lorsque cette pression est supprimee, en reponse a l'elas– ticite de l'organe de sortie, et des epaulements con jugues, prevus sur l'element de retenue et sur la chemise et empechant le deplacement de cet eie. ment de retenue et son echappement hors de la chemise; 180 Une levre annulaire formant joint entoure l'element de retenue et coopere avec la surface interne du corps, cette levre etant supportee par une partie de l'organe de sortie s'etendant sur la surface interne de l'element de retenue, cet organe de sortie

comprenant egalement une partie s'eten dant completement sur les surfaces internes de l'or gane extensible; 190 Les organes extensibles sont en matiere pouvant etre foree; 200 Des organes de portee conjugues de nature elastique sont prevus entre la chemise et le corps afin de permettre leur rotation relative, ces organes de portee comprenant un manchon elastique can nele axialement sur sa surface d'usure; 210 Des organes de limitation font saillie a partir de la chemise dans la direction predeterminee, afin de venir en contact avec le cote d'un puits dans lequel l'appareil est dispose, pour limiter l'etendue du mouvement selon lequel les organes d'ancrage peuvent deplacer la chemise vers ce cote, et des organes relient ces organes de limitation a cette chemise d'une facon reglable, afin de faire varier leur degre de saillie dans cette direction; 220 Les organes de limitation et les organes reliant ces organes de limitation a la chemise com prennent une bague montee sur la chemise afin de pouvoir tourner pour etre amenee dans une position en azimut desiree par rapport a cette chemise et pouvant etre bloquee dans cette position, cette bague comportant des bossages ayant des etendues radiales differentes, espaces en azimut autour de ladite bague, de sorte que l'un de ces bossages peut etre amene dans l'alignement de la direction de deplacement lateral de la chemise par les organes d'ancrage pour limiter ce depla cement; 230 Les organes de limitation et les organes reliant ces organes de limitation a la chemise com prennent deux bagues du type precite, montees respectivement au−dessus et au−dessous des organes d'ancrage, chacune de ces bagues etant maintenue entre deux epaulements annulaires de la chemise, ces epaulements etant prevus sur des parties tubu laires separees de la chemise, reunies par vissage de sorte que lesdites bagues peuvent tourner libre ment ou peuvent etre bloquees en place, selon le degre de serrage des parties tubulaires l'une sur l'autre par vissage; 240 Les organes d'etancheite sont portes par la chemise et comprennent des elements relies a l'extremite superieure du corps et menageant un epaulement oriente vers le bas, la chemise com prenant un manchon d'ecartement a son extremite superieure, l'extremite superieure de ce manchon d'ecartement pouvant etre attaquee par cet epau lement, ledit epaulement et l'extremite superieure du manchon constituant des organes limitant la course vers le haut de la chemise par rapport au corps, ce manchon d'ecartement empechant les organes d'etancheite de venir en contact avec la partie superieure du corps, qui est soumise a un endommagement pendant le raccordement du corps a une colonne de tiges; 250 Ii comprend un organe d'interception des debris, porte par l'extremite superieure du manchon d'ecartement, pour empecher la penetration des debris entre ce manchon et le corps, ledit manchon d'ecartement etant muni d'un orifice au voisinage de son extremite inferieure, pour permettre l'echap pement du fluide a partir dudit manchon; 260 Des organes assurent le montage des organes d'etancheite sur la chemise dans une relation per mettant un flottement radiai par rapport a elle; 270 Ii comprend un piston et un cylindre portes par la chemise et le corps et pouvant etre actionnes par un fluide sous pression provenant du corps, afin de solliciter ce corps vers le bas par' rapport a la chemise; 280 Le corps comprend une partie superieure et une partie inferieure reliees telescopiquement par des cannelures; 290 Des organes relient l'extremite superieure de la chemise a l'extremite superieure du corps d'une maniere permettant leur rotation tout en empechant un mouvement axial relatif; 301) Des organes de signalisation indiquent a la surface, a partir de l'outil, le moment auquel le corps s'est deplace vers le bas a travers la chemise jusqu'a sa position de fin de course; 310 Ces organes de signalisation comprennent des cames cooperant entre elles, prevues a l'extre mite superieure de la chemise et au voisinage du raccord du corps destine a etre relie a la colonne de tiges. [Source: revendication 1] 1.Summary I. Apparatus for drilling heads, CONSTITUTING a hollow body provided with members for its rac nection to a drill bit at one end and has a col umn rods has the other end, a shorter Director shirt that body, montee has rota tion on it and that can move longitudinally relative to it from a position in which this shirt is more rapprochee fitting that connects the drill bit the connector connected to the pipe string, until a position in which it is closer to the connector connects to the column rods that the connector connects to the drill bit, through a range of Interme mediate positions between these two positions limits of tightness bodies delimiting a chamber that can be pressurized between the liner and the body organs of transfering the pressurized fluid from inside the body into this room, these organs being ecards longitudina tightness of LEMENT both sides of the bodies of trans mission of pressure in all rela tive body positions and shirt, coope bodies operating with the wall of the well, which can project relative to the shirt when pressure is exerted in the chamber from inside the body, to cooperate with the wall of the well and to keep the liner in a desired position relative to said wall, while the body is moved axially through it between the position in which this sleeve is closest to the connector connects to the drill bit and the position in which said liner is nearer rac cord connects to the pipe string, and degageabies locking members, maintaining the shirt in this position on the body, this sleeve then being closest to the connector connects to the drill bit that the connector connects to the pipe string, until these locking members are cleared, degageabies said locking members comprising a lug engageable with a recess provided on the body and on the shirt, to prevent relative axial displacement of the two Elements when the pin is engaged in this housing. II.Payment realization of this device, as presen the following peculiarities, regarded sepa larly or collectively 10 pin lock system and lodge ment includes a first tab has the expected lower extre moth shirt, presenting a basic em s' extending downwardly from the extremity infe higher this shirt and a spout extending circum− ferentieueement from this base, led by giant housing slit between the lower extre moth shirt and beak the pin, and a second tab has planned the lower end of the body, including a base is extending upward from the lower end of the body and a spout extending circonferentieilement from the base of the second pin, in a direction of opposite direction spout first toe in providing a housing slit between the lower end of the body and the beak of the second pin; Of the 20 control elements react to a fluid pressure reigning in the body for com mander the locking device, the control elements that react to the fluid pressure inside the body to release the locking device at the same time as the organs may protrude from the folder are moved to be applied against the wall of the well in response to the fluid pressure reigning in the body; The control device 30 includes a piston rises way was able to move axially iement in the body under the effect of the fluid pressure reigning in this body, to undergo Depla cement in a given axial direction, and elastic bodies soliciting piston in the opposite axial direc tion; The system 40 has lug and housing comprises a housing formed in the sleeve and a lug fitted on the body and capable of undergoing displacement radiai relative to the axis of the body, between a position in which this stud engages the housing, and a position in which ii is disengaged from said housing; A lock member 50 is carried by the piston and can move axially therewith between a position in which ii prevents the inward movement of the pin, thereby maintaining this lug engages the housing, and a posi tion corresponding to a fluid pressure reigning in the body

and wherein the body Lock spinning is moved away from the pin, which allows the cement Depla thereof inwards and clears ment relative to the housing combines; 60 The cooperating agencies with the wall are saying poses way asymmetrical around the liner relative to its axis, to solicit the body in a direction PREDETERMINED relative to the borehole wall, a coupling that can be clutched in one position azimuth of the body and sleeve preventing movement angu lar on them, at least in one direction, this coupling and locking device engageable same time, so that, when they are both engaged, the che setting can be locked on the body in the position in azimuth and can be lowered into a well and moved up anguiairement a posi tion in azimuth Desired on the inside of the well, to urge the body in a direction also Desired; 70 The shirt is thicker in the parts where the bodies cooperating with the well wall are mounted, the rest of this shirt being thinner to strike a larger space for the flow of fluid into the annular space between menage the liner and a well in which this sleeve is disposed; 80 The bases of the pins include portions that are at the same radial distance from the axis of the body that the ends of the slats, and the coupling includes mating surfaces provided for the ends of the slats and on the side of each base a lug; 90 Ii comprises conjugated cam provided on the sleeve and body to move the sleeve and the body to bring in one position relative azimuth upon axial relative movement therebetween until a position coo peration of cam, the coupling can be engages by an axial relative displacement of this sleeve and of the body in this position azi mut predetermined to prevent relative rotation of these two components while allowing some axial movement relative until the in triggering of the locking device; 10o The cams include a shoulder directed upwards, is extending around the body, and a shoulder facing down, is extending around the lower end of the liner, each of these shoulders presenting a superior pair of helical surfaces right and left, each extending over part of the periphery of the body and the shirt around their axis and meeting at a summit, and a lower pair of helical surfaces right and left, extending chAcune over part of the circumference of the body and the jacket around their axis and meeting in a depression, the shoulders of the cams being inter broken at the junction of upper and lower pairs of helical surfaces, the ment comprising mates flat surfaces extending parallel to the axis of the sleeve and the body and joining the upper and lower pairs of helical cam surfaces; 110 A leave is formed in the cam to the right of each depression, the helical surfaces each comprising a helical straight surface, that is to say a surface defined geometrically and engendered by the movement of a line perpen lar to the axis of the sleeve and body, rotating at a constant speed around said axis when the point of intersection with the axis moves on said axis at a constant speed, the Heli coidales upper surfaces 90 each extending around this axis, the flat surfaces of the Accou plement all lying in a same plane passing through that axis; 120 The guide members hold the piston in a manner preventing its rotation relative to the body while allowing its axial tively soft, alignment organs doors by the piston cooperating with alignment organs doors by the conjugate piston doors by said positive control introduced into the body to position the control device such that it occupies a predetermined position in azimuth relative to the body; 130 i'ecouiement A valve control through the pressure transmission elements, this valve comprising a shutter preventing member LEMENT ecou fluid through the organs of trans mission of pressure, this element presen shutter as part can cooperate repechage with a tool, so that said shutter element can be back through a cable down in the body, the element shutter COMPOR cited above as a vertical canai, allowing the flow of fluid through the body while 3.e by preventing this ecou liament through the pressure transmission components; 140 The alignment members provided on the piston are disposed below the shutter element, in the vicinity of the lower end of the body, and this element = shutter has a tubular shape and provides a passage through which a device clearance may be lowered to come into cooperation with the alignment members; A hole 150 extends through –the shirt from the room to be put under pressure, until the outside of the shirt, and a normally closed valve commnade the flow through this hole and reacts to pressure formed in the chamber to open when the pres sure exceeds a predetermined value, for pro teger organ of tightness in order to avoid its ejec tion; This includes a 160 clapet–bushel with two parties with external diameters diffe ent, has in 3.A room of the liner and that can move back and forth in front of the orifice, which is menage a junction between two parts of the shirt with diameters interior diffe ent, supporting members elastic precon traints, PROVIDED at each end of the block, axially supporting this plug in a posi tion of balance in front of the hole, organ tightness axiaiement spaces on each side of the hole, seats between the portion of larger diameter of the valve and the portion of larger dia meter of the shirt, and the parties of smaller diameter of the valve and this shirt, ensuring the closure of the port when the valve is in its equilibrium position, a canai of Running ment has planned through the wall of a cer tain bushel distance of tightness target organs at each end of the valve allowing the passage of fluid between the inside and outside of the liner when said plug is axially moves ment from its equilibrium position in response to the application of pressure on the surface annulai re arranged between the parts of different diameters ABOVE; 170 Each of the positioning louse Vant occupy a deployed position of organs comprises a hollow retaining ele ment provided with an adapted outer wall has the shape of an orifice perimeter tra pouring the wall of the jacket and supports in a sealed relationship to the on within this hole, a gold gane = output of elastic links to the inner wall of the retaining element, the output member pre smelling a wall of smaller dimensions than the hole, located inside of this hole and reliee has an expandable member, said extensible member being studied in a way to protrude from the shirt to the pit wall when applying pressure from the inside of the shirt and is ecar ter this wall towards the shirt when this pressure is suppressed in response to the elasticity of the output member, and shoulders con jugues provided on the retaining element and on the shirt and preventing movement this eie.Ment restraint and its exhaust out of the shirt; 180 A lip forming annular seal surrounds the retaining element and cooperates with the internal surface of the body, the lip being supported by a portion of the output member extending on the inner surface of the retaining element, said member Release also including a portion andin ing completely on the inner surfaces of gold gane extensible; 190 extendible members are matters that can be foree; Of the 200 bodies conjugates scope of elastic kind are planned between the liner and the body to allow their relative rotation, the scope of members including an elastic sleeve can nele axially on its wear surface; 210 The limitation organs protrude from the shirt in the predetermined direction to come into contact with the side of a well in which the device is available, to limit the extent of the movement in which the organs of anchor can move the folder to that side, and the organs connect these restriction members has this shirt a way adjustable to vary their degree of projection in this direction; 220 The bodies of limitation and organs between these restriction members has com shirt take a montee ring on the liner for rotation to be people brought in azimuth desired position relative to this folder and can be blocked in this

position, this ring having bosses having different radial extents, azimuth space around said ring, so that one of these bosses can be brought into alignment with the direction of lateral movement of the jacket by the anchoring members to limit this Depla cement; 230 The bodies of limitation and organs between these restriction members has com shirt taking two rings of the type cited above, montees respectively above and below the anchor members, each of these rings being maintained between two annular shoulders shirt, these shoulders being provided on Tubu lar separated parts of the shirt, screwed together so that said rings can rotate free ment or can be be blocked up, as the tightening degree of tubular parts one on the other by screwing; 240 The tightness organs are worn by the shirt and include subsequently assembled elements to the upper end of the body and providing a shoulder facing down, the com shirt taking a spacing sleeve has its upper end, the upper end this sleeve spacing can be attacked by this Epau LEMENT, said shoulder and upper extremity of the sleeve forming organs limiting the upward stroke of the jacket from the body, this sleeve spacing PREVENTING organs of tightness of coming into contact with the upper body, which is subjected to damage during the connection of the body has a pipe string; 250 Ii includes a member for intercepting debris, door by the upper end of the sleeve of spacing, for preventing the penetration of debris between the sleeve and the body, said spacing sleeve being provided with a hole in the neighborhood its lower end, to allow fluid esc ment from said sleeve; Some 260 bodies ensure the installation of tightness bodies on the shirt in a relationship involving a floating per radiai compared to it; Ii 270 includes a piston and a cylinder doors by the shirt and the body and can be sets in action by a pressurized fluid from the body, to solicit this body down with 'report the shirt; The body 280 comprises an upper portion and a lower portion joined telescopically by splines; 290 Organs connect the upper extremity of the shirt has the upper body in a manner allowing extremity rotation while preventing relative axial movement; 301) The display elements indicate the surface, from the tool, the time at which the body is moved down through the jacket until its end position; 310 The display elements comprise cams cooperating with each other, provided for in the extre upper boundary of the shirt and the vicinity of the intended body connection has to be connected to the pipe string.

127) Family number: 49334457 (US2011209379A) © PatBase

Title: QUICK RELEASE CONNECTOR FOR FIREARM CLEANING KIT AND METHOD FOR USING THE SAME

Priority: CA20112731722 20110215 CA20112731722 20110215 US20100714944 20100301

Family:

Publication number	Publication date	Application number	Application date
BRPI1100865 A2	20120821	BR2011PI00865	20110228
CA2731722 AA	20110901	CA20112731722	20110215
CA2731722 C	20121120	CA20112731722	20110215
CN102213561 A	20111012	CN201110051093	20110301
CN102213561 B	20151007	CN201110051093	20110301
EP2363681 A2	20110907	EP20110305191	20110223
EP2363681 A3	20140604	EP20110305191	20110223
IL211157 A0	20110630	IL20110211157	20110210
IL211157 A1	20160531	IL20110211157	20110210
US2011209379 AA	20110901	US20100714944	20100301
US8448370 BB	20130528	US20100714944	20100301

Probable Assignee: OTIS PATENT TRUST

Assignee(s):(std)**:** OTIS PATENT TRUST ; WILLIAMS NICHOLAS

Assignee(s): THE OTIS PATENT TRUST

Inventor(s):(std)**:** NICHOLAS WILLIAMS ; WILLIAMS NICHOLAS

Agent(s): MOFFAT AND CO; PALIX STEPHANE; REINHOLD COHN AND PARTNERS; HARRIS BEACH PLLC

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

International class (IPC 8–9): B08B9/043 F16D1/06 F41A F41A29/00 F41A29/02 (Advanced/Invention)

CPC: F41A29/02

European class: F41A29/02

US class: 42/95 42/95P

Classification Explorer

Cited documents: US6630034 BA, US596490 A, US5934000 A, US5074699 A, US4716673 A, US3402950 A, US3123881 A, US3002466 A, US2005045510 AA, CN101238345 A, CH50381 A,

Forward Citations: USD696741, USD683810, USD677356, USD677355, USD675703, USD672424, USD672423, US9644917, US9546841, US9377265, US9366496, US9115947, US9115945, US8925235, US8863431, US2016223288, US2015159973, US2013283658, US2013269234, KR101691090, CN103808202, CN103808202,

Abstract:
Source: US2011209379A Embodiments of the application can include a cleaning kit for a firearm and methods for using the same. Embodiments of a cleaning kit can include an elongated (e.g., flexible) shaft and different cleaning tips releasably attachable to and detachable from the shaft. First and second universal couplings can be respectively attached to ends of the shaft and cleaning tips to releasably attach the cleaning tips to the shaft. An adapter can have the first or second universal coupling on a first end and a retrofit coupler (e.g., internal or external threaded bore) on the second opposite end.

0) US2012048870A – BEVERAGE CONTAINER END WITH MULTIPLE OPENINGS

128) Family number: 50736459 (US2012048870A) © PatBase

Title: BEVERAGE CONTAINER END WITH MULTIPLE OPENINGS

Priority: US20100402215P 20100826 US20110219052 20110826

Family:

Publication number	Publication date	Application number	Application date
US2012048870 AA	20120301	US20110219052	20110826

Probable Assignee: ELLERBE III HARRY LACOSTE

Assignee(s):(std)**:** ELLERBE III HARRY LACOSTE ; FINCH BRYAN DWIGHT

Inventor(s):(std)**:** ELLERBE III HARRY LACOSTE ; FINCH BRYAN DWIGHT

International class (IPC 8–9)**:** A47G19/22 B65D17/32 (Advanced/Invention)

CPC: B65D17/165 B65D2205/02 B65D2231/022 B65D2517/0014 B65D2517/0049

European class: B65D17/16B2 L65D205/02 L65D231/02A L65D517/00Y2C L65D517/00Y6A

US class: 220/269 220/269S 220/712

Classification Explorer

Cited documents: US6131763 A, US2012199586 AA, US2004144787 AA, US2003213803 AA,

Forward Citations: WO16028860, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, US9446879, US9296529, US9233784, US9181007, US8567158, US2014069924,

Abstract:
Source: US2012048870A A beverage container has a tab member rotatably and pivotally mounted thereon. The tab member can be used to form two separate openings in the can top, and each opening can be used either independently or together. One opening is the main drink opening, and the other opening is designed to receive a straw. While the primary use for the second opening is to receive a straw, the second opening may also serve as a built in vent when the main drink opening is used.

0) US3434623A – CONTAINER WITH PULL–TAB OPENER

129) Family number: 154738 (US3434623A) © PatBase

Title: CONTAINER WITH PULL–TAB OPENER

Priority: GB19660053907 19661201 GB19670003298 19670123 GB19670026067 19670606 GB19670036612 19670809

Family:

Publication number	Publication date	Application number	Application date
AU3045167 A1	19690605	AU19670030451	19671128
CH483342 A	19691231	CH19670016795	19671129
FR1559666 A	19690314		19671130
GB1213626 A	19701125	GB19670036612	19661201
US3434623 A	19690325	US19670665919	19670906

Probable Assignee: COOKSON SHEET METAL DEVELOPERS

Assignee(s):(std)**:** COOKSON SHEET METAL DEV LTD ; COOKSON SHEET METAL DEVELOPERS

Assignee(s): COOKSON SHEET METAL DEVELOPERS LIMITED ; COOKSON SHEET METAL DEVELOPMENTS LIMITED ; COOKSON SHEETMETAL DEVELOPMENTS LTD

Inventor(s):(std)**:** COOKSON WILLIAM ; WILLIAM COOKSON

International class (IPC 8–9)**:** B21D37/10 B21D51/38 B21D51/40 B65D17/32 (Advanced/Invention); B21D51/38 (Core/Invention)

International class (IPC 1–7)**:** B65D17/20 B65D17/24

CPC: B21D51/383 B65D17/163

European class: B21D51/38B B65D17/16B1

US class: 220/270 220/54 D9/438

Classification Explorer

Cited documents: US3366270 A, US2029329 A,

Forward Citations: WO16163981, USRE28776, US9540137, US8973780, US8973779, US8875936, US8870012, US8695832, US8328492, US8104319, US8052005, US8011527, US7644833, US7556168, US7350392, US7174762, US7004345, US6772900, US3990376, US3951084, US3939787, US3871314, US3853080, US3848557, US3765352, US3705563, US3696961, US3630408, US3625392, US2013213981, US2013020326, US2009269169, US2009266824, US2009090716, US2009039091, US2008257900, US2008050207, US2006096994, US2005006388, US2004211780, US2004200838, US2004065663, US2003042258, US2003001788, GB2289662, FR2337668, FR2032319,

Abstract:
Source: US3434623A ABSTRACT OF THE DISCLOSURE There is disclosed hand operable opening means for containers especially adaptable for use in a lid of a tinplate container. Substantially the whole, or a portion, of a lid may be removed by an upward pull on a handle. First, a portion of the handle hinges downwardly to start the opening along a weakened line and then continued upward force on the handle tears out a portion along the remainder of the weakened line. The problem of the handle separating from the lid is overcome by forming a channel with reverse folds, the folds overlying tabs on the handle. A method of forming such folds without tearing the metal is described.

0) US3938696A – INCLINED INTEGRAL RIVET ON END PANEL FOR TAB CO...

130) Family number: 1237804 (US3938696A) © PatBase

Title: Inclined integral rivet on end panel for tab control

Priority: JP19750084797U 19750620 US19740507040 19740918

Family:

Publication number	Publication date	Application number	Application date
CA1011670 A1	19770607	CA19750220116	19750214
GB1518963 A	19780726	GB19750038130	19750917
HK25780 A	19800523	HK19800000257	19800515
JP51040660 U1	19760326	JP19750084797U	19750620
JP55021952 Y1	19800526	JP19750084797U	19750620
JP55021952 Y2	19800526	JP19750084797U	19750620
US3938696 A	19760217	US19740507040	19740918
ZA7500352 A	19760825	ZA19750000352	19750117

Probable Assignee: CONTINENTAL CAN CO

Assignee(s):(std)**:** CONTINENTAL CAN CO ; CONTINENTAL GROUP

Assignee(s): CONTINENTAL GROUP INC ; HERBST EDWARD J ; CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC

Inventor(s):(std)**:** HERBST EDWARD J ; HERBST E

International class (IPC 8–9)**:** B65D17/34 B65D41/32 (Advanced/Invention); B65D17/28 B65D41/32 (Core/Invention); B65D (Subclass/Invention)

International class (IPC 1–7)**:** B65D17/16 B65D17/24 B65D17/34 B65D41/32

CPC: B65D17/165 B65D79/005

European class: B65D17/16B2 B65D79/00B

US class: 220/273

Classification Explorer

Cited documents: US3858754 A, US3446390 A, US3428211 A,

Forward Citations: WO14149484, WO10122111, WO09080298, US9359108, US9199763, US9033174, US9016034, US8998015, US8733576, US8454292, US8371467, US8113375, US4994009, US4930658, US4266688, US4202287, US2014346174, US2011186575, US2011006065, US2010287886, US2010163560, US2010116374, US2007108209, KR101566559, JP62176336, JP56106747, JP2013500905, JP2012524699, JP2011507767, JP2010519147, EP2969818, EP2253552, EP2075199, EP0381888, CN102428010, AU2014238112, AU2009289732, AU2008340651,

Abstract:
Source: US3938696A An improved easy–open end closure which maintains close contact between a tab and container end panel prior to opening, regardless of doming of the end panel. An integral rivet is formed on the end panel inclined off–center 10 DEG –20 DEG toward the end panel center, the rivet securing the pull tab thereto whereby the tab converges with the end panel toward the periphery thereof.

0) US3869063A – EASY OPENING CLOSURE FOR CONTAINERS

131) Family number: 17804464 (US3869063A) © PatBase

Title: Easy opening closure for containers

Priority: DE19720022042U 19720613 DE19727222042U 19720613

Family:

Publication number	Publication date	Application number	Application date
CA994689 A1	19760810	CA19730171507	19730516
DE7222042 U	19720914	DE19720222042U	19720613
FR2187621 A1	19740118	FR19730021182	19730612
FR2187621 B1	19770909	FR19730021182	19730612
GB1428441 A	19760317	GB19730026521	19730604
US3869063 A	19750304	US19730360010	19730514

Probable Assignee: SCHMALBACH LUBECA

Assignee(s):(std)**:** SCHMALBACH LUBECA

Assignee(s): SCHMALBACH LUBECA WERKE A G ; SCHMALBACH LUBECA WERKE A G DT ; SCHMALBACH LUBECA WERKE AKTIENGESELLSCHAFT ; SCHMALBACH LUBECA WERKE AG ; HIMSTEDT KURT

Inventor(s):(std)**:** HIMSTEDT KURT

International class (IPC 8–9)**:** B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7)**:** B65D17/16 B65D17/20 B65D17/24

CPC: B65D17/163

European class: B65D17/16B1

US class: 220/270 220/276

Classification Explorer

Cited documents: US3795340 A, US3762596 A, US3593877 A,

Forward Citations: WO04041666, USD731887, US9403628, US9162795, US3984025, US3952913, US2006060582, GB2158412, FR2459181, ES2238116, EP1561694, BE1005750,

Abstract:
Source: US3869063A This disclosure relates to an easy opening closure for containers of the type having a displaceable panel portion defined by a weakening line and wherein a pull tab is secured to the displaceable panel portion for effecting the rupture of the closure along the weakening line and the displacement of the panel portion thereof. A pull tab is secured to the displaceable panel portion by means of securing means such as a rivet and is subject to turning so as to render the same ineffective. The pull tab is interlocked with the displaceable panel portion by a simple punching operation which forms a projection on the underside of the pull tab and a like configurated socket in the panel portion receiving the projection.

0) FR1399815A – BOITE DE CONSERVE A OUVERTURE FACILE A BOX OF ...

132) Family number: 21170578 (FR1399815A) © PatBase

Title: BOITE DE CONSERVE A OUVERTURE FACILE A BOX OF CANNED EASY OPENING (Machine translation)

Priority: FR19640974037 19640511

Family:

Publication number	Publication date	Application number	Application date
FR1399815 A	19650521	FR19640974037	19640511

Probable Assignee: CONTINENTAL CAN CO

Assignee(s):(std)**:** CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC

International class(IPC 1–7)**:** B65D17/24

CPC: B65D17/163

European class: B65D17/16B1

Classification Explorer

Abstract:
Source: FR1399815A (Claim 1) 1 vee avec la bande de dechirure de la facon representee sur la figure 13, au lieu de pivoter et de penetrer dans le produit contenu dans le recipient 15, et la partie arrachee de l'extremite 16 du recipient est levee dire (tement en dehors du plan de son pannean d'extremite. Ceci evite l'accumulation du produit contenu dans le recipient 15 sur la partie enlevee de l'extremite 16 de la boite de conserve et par suite evite

Machine translation: (Claim 1) Vee with a tear strip in the manner shown in Figure 13, instead of rotate and penetrate into the product inside the container 15, and the torn part of the extremity 16 of said container is exercised (apart ment plan of its pannean extremity. This avoids the accumulation of the product inside the container 15 of the removed portion of the extremity 16 of the tin can and therefore avoids

0) US4881662A – DISPENSING SPOUT

133) Family number: 3245724 (US4881662A) © PatBase

Title: Dispensing spout

Priority: US19880199830 19880527

Family:

Publication number	Publication date	Application number	Application date
US4881662 A	19891121	US19880199830	19880527

Probable Assignee: TALLMAN GARY C

Assignee(s):(std)**:** TALLMAN GARY C

Inventor(s):(std)**:** TALLMAN GARY C

International class (IPC 8–9)**:** B67B7/48 (Advanced/Invention); B67B7/00 (Core/Invention)

International class (IPC 1–7)**:** B67B7/24

CPC: B67B7/26

European class: B67B7/26

US class: 222/543 222/569 222/81 222/89 222/91 285/136.1 285/158 285/220 285/362

Classification Explorer

Cited documents: US4712714 A, US3973698 A, US3549049 A, US3333737 A, US3184107 A, US3114480 A, US1618720 A, US1401584 A, GB1418829 A, CA675333 A,

Forward Citations: US9656310, US8967430, US8128132, US8100879, US7503142, US7331487, US7222453, US7201525, US7118427, US7118427, US7073686, US6932239, US6095433, US5971207, US5855298, US5598951, US5379918, US5325995, US5249708, US5068496, US2015273543, US2015048110, US2013015202, US2012255972, US2011127281, US2010320229, US2008084032, US2008035498, US2006272077, US2006148336, US2006018701, US2005235554, US2005092769, US2005014306, US2004155054, US2004153047, EP1970322, EP0770555,

Abstract:
Source: US4881662A A dispensing spout includes a tubular body having axially opposite ends of which one end has a cutting edge for penetrating the wall of a container from which a product is to be dispensed and an opposite end of the tubular body has a groove defined by an axial groove portion and two generally radial grooved portions each ending in a blind wall. A ring is freely slidably received on the tubular body and has a tab in registration with the groove. A gasket is sandwiched between the retaining ring and the thread of the tubular body. The tab of the ring is engaged in one of the radially grooved portions for threading the tubular body into the container after the wall has been punctured. The tab is further received in the other of the radial grooves for compressing the gasket and effecting the seal between the dispensing spout and the container.

0) US2013271977A – ADJUSTABLE, MODULAR LIGHTING FIXTURE

134) Family number: 54976053 (US2013271977A) © PatBase

Title: ADJUSTABLE, MODULAR LIGHTING FIXTURE

Priority: US20120447681 20120416

Family:

Publication number	Publication date	Application number	Application date
US2013271977 AA	20131017	US20120447681	20120416
US8926126 BB	20150106	US20120447681	20120416

Probable Assignee: 3FORM LLC

Assignee(s):(std)**:** 3FORM INC ; 3FORM LLC ; ROGERS STEPHEN LYNN ; RONEN YARON ; HILLSTROM BRIAN

Inventor(s):(std)**:** HILLSTROM BRIAN ; ROGERS STEPHEN LYNN ; RONEN YARON

Agent(s): WORKMAN NYDEGGER

International class (IPC 8–9)**:** F21V13/04 F21V17/02 F21V19/00 F21V19/02 F21V21/00 F21V21/14 F21V5/04 (Advanced/Invention)

CPC: F21V21/30 F21V15/013 F21Y2115/10

US class: 362/225 362/235 362/236 362/239 362/249.01 362/249.03 362/249.1

Classification Explorer

Cited documents: US7572028 BB, US2011310604 AA, US2011141722 AA, US2011128737 AA, US2011051407 AA, US2011051401 AA, US2010295468 AA, US2010284181 AA, US2010271804 AA, US2009040782 AA, US2008304252 AA, DE4310760 A1,

Forward Citations: USD787112, US9551469, US9534770, US9188291, US2016186963, US2015116990, EP3070400, DE102015205003, DE102015205003,

Abstract:
Source: US2013271977A Implementations of the present invention relate to a rotatable and/or slidable lighting module. The lighting module can have a lighting fixture assembly that is optionally capable of rotating with respect to a support base to allow the lighting fixture assembly to project light on a desired surface or area. The lighting fixture assembly can also slide or move relative to the support base to allow the position of the lighting fixture to be selectively varied.

0) US2016369866A – DEVICE FOR FILTERING VIBRATIONS

135) Family number: 64430188 (US2016369866A) © PatBase

Title: DEVICE FOR FILTERING VIBRATIONS

Priority: FR20150055576 20150618

Family:

Publication number	Publication date	Application number	Application date
CN106438951 A	20170222	CN201610447349	20160620
FR3037626 A1	20161223	FR20150055576	20150618
US2016369866 AA	20161222	US20160186819	20160620

Probable Assignee: VALEO EMBRAYAGES

Assignee(s):(std)**:** VALEO EMBRAYAGES

Inventor(s):(std)**:** HENNEBELLE MICHAEL ; VERHOOG ROEL ; CAILLERET FRANCK

Inventor(s): FRANCK CAILLERET ; MICHAEL HENNEBELLE ; ROEL VERHOOG

Agent(s): VALEO TRANSMISSIONS

International class (IPC 8–9): B60K17/04 F16D3/06 F16D3/12 F16F15/14 F16H57/028 (Advanced/Invention)

CPC: F16F15/1421 F16D3/06 F16F15/1428

US class: 464/162

Classification Explorer

Cited documents: WO14123174 A1,

DE102012218918 A1

DE102008053377 A1

Abstract:
Source: US2016369866A An inertial deflector (1) for a motor vehicle transmission system, having: a support member (7) intended to be associated with an element (3) of the transmission system and to be driven rotationally around an axis X; an inertia mass (8) mounted rotationally movably on the support member (7) around the axis X; and helical springs (9) arranged along a circumferential direction and elastically rotationally coupling the support member (7) and the inertia mass (8); each of the helical springs (9) is received in a receiving space that is delimited between on the one hand a recess (22) configured in the inertia mass (8) and radially and axially guiding the helical spring, and on the other hand a rim zone (23) of the support member (7) covering the recess (22) in order to axially retain the helical spring (9) in the recess (22).

0) US5555992A – DOUBLE HINGED OPENING FOR CONTAINER END MEMBERS...

136) Family number: 8613001 (US5555992A) © PatBase

Title: DOUBLE HINGED OPENING FOR CONTAINER END MEMBERS

Priority: US19940276331 19940715 US19950393140 19950221 WO1995US08764 19950713

Family:

Publication number	Publication date	Application number	Application date
AU199529706 A1	19960216	AU19950029706	19950713
US5555992 A	19960917	US19950393140	19950221
WO9602432 A1	19960201	WO1995US08764	19950713

Probable Assignee: MILLERCOORS LLC

Assignee(s):(std): COORS BREWING CO ; SEDGELEY WILLIAM ARTHUR

Assignee(s): COORS BREWING CO 12TH AND EAST STREETS GOLDEN CO ; COORS BREWING COMPANY ; COORS GLOBAL PROPERTIES INC ; MILLERCOORS LLC

Inventor(s):(std): SEDGELEY WILLIAM A ; SEDGELEY WILLIAM ARTHUR

Inventor(s): WILLIAM ARTHUR SEDGELEY

Designated states: AM AT AU BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CZ DE DK EE ES FI FR GA GB GE GN GR HU IE IS IT JP KE KG KP KR KZ LK LR LT LU LV MC MD MG ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SN SZ TD TG TJ TM TT UA UG US UZ VN

International class (IPC 8–9): B65D17/32 B65D17/34 B65D41/32 (Advanced/Invention)

International class (IPC 1–7): B65D17/34 B65D41/32

CPC: B65D17/165 B65D2517/0095 Y10S220/906

European class: B65D17/16B2 L65D517/00Y8C

US class: 220/269 220/270 220/271 220/273 220/906

Classification Explorer

Cited documents: US5307947 A, US5064087 A, US5011037 A, US4901880 A, US4804104 A, US4605141 A, US4485935 A, US4320850 A, US4289251 A, US4257529 A, US4183445 A, US4150765 A, US4084721 A, US4061243 A, US4015744 A, US3977561 A,

Forward Citations: WO16028860, WO14150180, WO11053776, WO08008892, WO04009459, USD787952, USD762114, USD758207, USD750488, USD749415, USD742251, USD731887, USD727725, USD715647, USD715144, USD698668, USD691039, USD650278, USD650277, USD650276, US9580203, US9561888, US9446879, US9403628, US9371152, US9358604, US9315290, US9233784, US9181007, US9162795, US9051081, US9033175, US8950619, US8931660, US8877111, US8727169, US8720717, US8689998, US8678221, US8640905, US8573432, US8567158, US8505765, US8397935, US8109406, US7975884, US7513383, US6761281, US6260728, US6202880, US6129230, US6079583, US5964366, US5711448, US5683006, US2015367984, US2015353229, US2014190971, US2010018976, US2009050637, US2008190934, US2008099480, US2008011786, US2007284332, US2005173437, JP2009543737, EP2601109, EP2601109, EP1857370, EP1353852, CN105228911, AU2007272421,

Abstract:
Source: US5555992A A container end member has a peripheral wall and integral central end wall portion with a stay–on–tab mounted on the central end wall portion for pivotal and rotational movement and a score line groove defined by two spaced apart terminal ends formed in the central end wall portion for defining a severable panel portion that is large enough so that when severed will provide an elongated opening that vents the container to permit pouring of the beverage in the container at faster pour rates than now available.

0) US2008217361A – BEVERAGE DISPENSING ASSEMBLY

137) Family number: 42146328 (US2008217361A) © PatBase

Title: BEVERAGE DISPENSING ASSEMBLY

Priority: EP20080731650 20080307 US20070684326 20070309 US20080014875 20080116 US20080040062 20080229 US20080088776P 20080814 US20080264023 20081103 US20090414199 20090330 US20090496051 20090701 US20090556719 20090910 WO2008US56187 20080307 US20110276488 20111019

Family:

Publication number	Publication date	Application number	Application date
AU2008226514 AA	20080918	AU20080226514	20080307
AU2008226514 BB	20140522	AU20080226514	20080307
CA2680379 AA	20080918	CA20082680379	20080307
DE602008024579 D1	20130718	DE200860024579T	20080307
EP2129596 A1	20091209	EP20080731650	20080307
EP2129596 A4	20110601	EP20080731650	20080307
EP2129596 B1	20130515	EP20080731650	20080307
EP2628692 A1	20130821	EP20130002516	20080307
ES2423707 T3	20130923	ES20080731650T	20080307
HK1138820 A1	20140214	HK20100105656	20100609
US2008217361 AA	20080911	US20070684326	20070309
US2008217362 AA	20080911	US20080014875	20080116
US2008217363 AA	20080911	US20080040062	20080229
US2009140006 AA	20090604	US20080264023	20081103
US2009261129 AA	20091022	US20090414199	20090330
US2009302038 AA	20091210	US20090496051	20090701
US2009321443 AA	20091231	US20090556719	20090910
US2012031932 AA	20120209	US20110276488	20111019
US8070023 BB	20111206	US20070684326	20070309
WO08112535 A1	20080918	WO2008US56187	20080307
ZA200906918 A	20100630	ZA20090006918	20091005

Probable Assignee: ON TAP LLC

Assignee(s):(std): VITANTONIO MARC L ; SPIRK JOHN W ; TAPPER JAY ; REPLOGLE JOHN ; RABBITT WILLIAM E ; SPIRK JR JOHN W ; TAGGART JEFFREY S ; VISY PACKAGING PTY LTD ; BROWN PATRICK W ; KALMAN JEFFREY M ; NOTTINGHAM JOHN R ; NOTTINGHAM JOHN W ; ON TAP LLC

Assignee(s): ON TAP LLC CLEVELAND HEIGHTS

Inventor(s):(std): BROWN PATRICK W ; KALMAN JEFFREY M ; NOTTINGHAM JOHN R ; NOTTINGHAM JOHN W ; RABBITT WILLIAM E ; REPLOGLE JOHN ; SPIRK JOHN W ; SPIRK JR JOHN W ; TAGGART JEFFREY S ; TAPPER JAY ; VITANTONIO MARC L

Inventor(s): VITANTONIO MARC L SOUTH RUSSELL ; WILLIAM E RABBITT ; TAPPER JAY PALM BEACH GARDENS ; SPIRK JOHN W GATES MILLS ; REPLOGLE JOHN RALEIGH ; RABBITT WILLIAM E SOLON ; NOTTINGHAM JOHN W BRATENAHL ; NOTTINGHAM JOHN R BRATENAHL ; KALMAN JEFFREY M CLEVELAND HEIGHTS ; MARC L VITANTONIO ; JAY TAPPER ; JEFFREY M KALMAN ; JOHN R NOTTINGHAM ; JOHN REPLOGLE ; JOHN W NOTTINGHAM ; JOHN W SPIRK

Agent(s): SPRUSON AND FERGUSON; DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; MUELLER BORE AND PARTNER PATENTANWAELTE PARTG MBB; MUELLER BORE AND PARTNER PATENTANWAELTE; MUELLER BORE AND PARTNER PATENTANWAELTE; PONS ANGEL; FAY SHARPE LLP; WITHROW JONATHAN A

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC

LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65B3/04 B65B43/40 B65B7/00 B65B7/28 B65D41/04 B65D43/26 B65D5/72 B65D83/00 B67D1/00 B67D1/04 B67D1/12 B67D1/16 B67D5/00 B67D5/06 B67D5/60 B67D7/06 B67D7/78 B67D99/00 (Advanced/Invention);
B67D1/00 (Advanced/Non–invention);
B65B43/40 B65B7/28 B65D41/04 B65D43/00 B65D5/72 B65D83/00 B67D1/00 B67D7/78 B67D99/00 (Core/Invention);
B65D B67D (Subclass/Invention)

CPC: B67D1/0418 B67D1/1252 B67D1/1281 B67C3/30 B67D1/0082 B67D1/0802 B67D1/0805 B67D2001/0089 B67D2001/0824 B67D1/0801 B67D1/0804 B67D1/0809 B67D1/0857 B67D1/0858 B67D1/0869 B67D1/0891 B67D1/1256 B67D1/14 B67D1/1466 B67D2210/00036

European class: B67C3/30 B67D1/00H8B B67D1/04B2 B67D1/08A12 B67D1/08A2 B67D1/08A4 B67D1/08A6 B67D1/08D B67D1/08D2 B67D1/08D4 B67D1/08K2 B67D1/12G B67D1/12H B67D1/12M2B B67D1/14 B67D1/14B6B L67D1/00H8M4 L67D1/08A L67D1/08A34B L67D210/00D2B2

US class: 141/1 141/1S 215/329 215/329S 215/44 215/44S 220/200 220/260 220/707 220/707S 222/108 222/394 222/396 222/399 222/400.7 222/464.1 222/464.100S 222/5 222/571 222/571S 222/5S 53/492 53/492S

Classification Explorer

Cited documents: WO9839246 A1, WO08155494 A1, WO08066376 A1, WO08048098 A1, WO08044923 A1, WO0067628 A1, US7631783 BA, US7188644 BB, US6824017 BB, US6814383 BB, US6651852 BB, US6616011 BB, US6553779 BA, US6546737 BA, US653516 A, US6530235 BB, US6516839 BA, US6502725 BA, US6502406 BB, US6484903 BB, US6386403 BB, US6367665 BA, US6360923 BA, US6059152 A, US5979715 A, US5979713 A, US5404901 A, US5329975 A, US5260081 A, US5129552 A, US5126552 A, US5110012 A, US5104003 A, US5096095 A, US5022565 A, US4984717 A, US4982876 A, US4940169 A, US4923095 A, US4919310 A, US4785972 A, US4765512 A, US4735348 A, US4735248 A, US4676287 A, US4632276 A, US4520950 A, US4437588 A, US4402429 A, US4383399 A, US4264019 A, US4222972 A, US4120425 A, US4116362 A, US4032047 A, US3907174 A, US3843172 A, US3822716 A, US3613954 A, US3583289 A, US3561649 A, US3434632 A, US3403820 A, US3373907 A, US3343726 A, US3327899 A, US3325053 A, US3317089 A, US3294298 A, US3294289 A, US325053 A, US3244326 A, US3239102 A, US3233779 A, US3211350 A, US3200991 A, US3195779 A, US3161327 A, US3150799 A, US3006515 A, US2917906 A, US2842293 A, US2774521 A, US2547052 A, US2319517 A, US2222247 A, US2165684 A, US2159729 A, US2125248 A, US2115052 A, US2051981 A, US2010199606 AA, US2007000941 AA, US2006169725 AA, US2005269361 AA, US2005268985 AA, US2005263578 AA, US2003205285 AA, US2003038145 AA, US1932147 A, US1835541 A, FR2693437 A1, DE98965 A,

Forward Citations: WO14205477, WO12167333, WO12062609, WO12056018, WO11130795, WO11079151, USD645694, USD645288, USD645287, USD617136, US9670048, US9604236, US9469518, US9434595, US9352949, US9248416, US9221666, US9205387, US9181021, US9126816, US9038923, US8950636, US8919669, US8906438, US8820556, US8757439, US8469242, US8464766, US8157435, US2015266713, US2015203341, US2015053277, US2014332553, US2014272052, US2014263477, US2014075888, US2013306673, US2013233895, US2013233878, US2013221034, US2013214011, US2013068798, US2013015212, US2013008898, US2012312837, US2012228311, US2011240765, US2011147406, US2011121027, US2011038989, US2011036807, US2011036414, US2010294799, US2010232256, US2010126595, US2010005811, RU2575596, JP2014520042, GB2488717, GB2488717, EP2987767, EP2447208, CN104670706, CN103344391, CN103189304, CN103189304, CN102834184, BE1020003, AU2013328605,

Abstract:
Source: US2008217361A A beverage dispensing assembly that is capable of dispensing controlled or metered portions of a beverage charged with a gas fits onto a shelf in a conventional household refrigerator. The beverage dispensing assembly includes a sealed disposable container assembly that contains the beverage and a dispensing assembly that cooperates with the container assembly to selectively unseal the container assembly and dispense controlled portions of the beverage from the container assembly.

0) US3593877A – PULL TAB MOUNTING ARRANGEMENT FOR EASY OPENING ...

138) Family number: 432246 (US3593877A) © PatBase

Title: PULL TAB MOUNTING ARRANGEMENT FOR EASY OPENING CAN END

Priority: US19690861650 19690929

Family:

Publication number	Publication date	Application number	Application date
DE2032929 A1	19710422	DE19702032929	19700703
DK124189 B	19720925	DK19700004946	19700928
FR2063044 A1	19710702	FR19700021140	19700609
FR2063044 B1	19740920	FR19700021140	19700609
NO123990 B	19720214	NO19700003664	19700928
SE349278 B	19720925	SE19700012376	19700911
US3593877 A	19710720	US19690861650	19690929
ZA7001545 A	19711027	ZA19700001545	19700306

Probable Assignee: CONTINENTAL CAN CO

Assignee(s):(std)**:** CONTINENTAL CAN CO

Assignee(s): CONTINENTAL CAN CO INC ; CONTINENTAL CAN COMPANY INC ; CONTINENTAL CAN CY INC ; CONTINENTAL CAN CY INC US

Inventor(s):(std)**:** KHOURY N ; KHOURY N S ; KHOURY NICK S

Inventor(s): NICK S KHOURY ; NICK SHIHADEH KHOURY

International class (IPC 8–9): B65D17/00 (Advanced/Invention); B65D17/00 (Core/Invention); B65D B67B (Subclass/Invention)

International class (IPC 1–7): B65D17/00 B65D17/16 B65D17/24 B65D17/34 B67B

CPC: B65D17/163

European class: B65D17/16B1

US class: 220/273 220/54

Classification Explorer

Cited documents: US3451367 A, US3450301 A, US3450300 A, US3366270 A,

Forward Citations: US4445621, US4394927, US3869063, US3782586, US3724709, EP1846301, DE2537874,

Abstract:
Source: US3593877A A pull tab mounting arrangement for an easy opening container of the type having a tear–out or removable panel portion defined by a score line. The pull tab includes a score line penetrating nose and is mounted for tilting movement on the removable panel portion about a rivet receiving attaching ear defined by a U–shaped lance. A dimple is formed in the removable panel portion and is disposed within opposing open end slots formed in the attaching ear and tab body on opposite sides of the lance whereby the dimple prevents rotation of the pull tab about the rivet so as to maintain the tab nose aligned with the score line.

139) Family number: 63986285 (US2016331443A) © PatBase

Title: SYSTEM FOR USE IN TREATMENT OF VERTEBRAL FRACTURES

Priority: US20150159806P 20150511 US20150815812 20150731

Family:

Publication number	Publication date	Application number	Application date
US2016331443 AA	20161117	US20150815812	20150731
WO16183178 A1	20161117	WO2016US31822	20160511

Probable Assignee: DFINE INC

Assignee(s):(std)**:** DFINE INC

Inventor(s):(std)**:** BALBIERZ DANIEL ; PHAN CHRISTOPHER U ; PURDY CRAIG

Agent(s): BETHARDS MATTHEW S ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9)**:** A61B1/008 A61B17/16 A61B17/32 A61B17/34 A61B17/88 A61B18/14 A61F2/46 (Advanced/Invention)

CPC: A61B18/1477 A61B18/1442 A61B18/148 A61B17/1671 A61B2017/00986 A61B2018/00202 A61B2018/00565 A61B2018/00577 A61B2018/00589 A61B2017/00309 A61B2017/00323

US class: 606/41

Classification Explorer

Cited documents: US2013041377 AA, US2012130381 AA, US2008287741 AA,

Abstract:
Source: US2016331443A Devices having a shaft for creating cavities within tissue and articulating without twisting of the articulated shaft and methods for using such devices. Where such devices and methods include using of a device with keyed portions and key receiving portions that nest together upon articulation and optionally a torque limiter to allow for rotation of the shaft upon exceeding a torque limit. Method and devices also including such devices with energy application portions.

0) US3391820A – EASY OPEN CAN END

140) Family number: 829537 (US3391820A) © PatBase

Title: Easy open can end

Priority: US19670623941 19670317

Family:

Publication number	Publication date	Application number	Application date
US3391820 A	19680709	US19670623941	19670317

Probable Assignee: FRAZE ERMAL C

Assignee(s):(std)**:** FRAZE ERMAL C

Assignee(s): ERMAL C FRAZE

Inventor(s):(std)**:** BROWN OMAR L

International class(IPC 1–7)**:** B65D17/24

CPC: B65D17/163

European class: B65D17/16B1

US class: 220/270 220/54

Classification Explorer

Cited documents: US3322296 A, US2085200 A, CA752696 A,

Forward Citations: US6328355, US3685683, US3439833,

Abstract:
Source: US3391820A ABSTRACT OF THE DISCLOSURE A tab for severing a full–sized tear panel from a can top is divided by a forward fold into a folded–under rear–wardly extending base portion that is attached directly to the panel by two laterally spaced rivets and an upper lever portion having a short and narrow working arm extending forward beyond the fold, the fold serving as a hinge for the lever portion. B

0) EP0648680A1 – EASY–OPENING CLOSURE. LEICHT ZU OEFFNENDER VER...

141) Family number: 10365620 (EP0648680A1) © PatBase

Title: Easy–opening closure.

Priority: GB19930021118 19931013

Family:

Publication number	Publication date	Application number	Application date
EP0648680 A1	19950419	EP19940307478	19941012
GB9321118 A0	19931201	GB19930021118	19931013

Probable Assignee: CARNAUDMETALBOX PLC

Assignee(s):(std)**:** METAL BOX PLC

Assignee(s): CARNAUD METALBOX PLC ; CARNAUDMETALBOX PLC

Inventor(s):(std)**:** FORSKETT PETER STANLEY ; RAMSEY CHRISTOPHER PAUL

Designated states: AT BE CH DE DK ES FR GB GR IE IT LI NL PT SE

International class(IPC 1–7)**:** B65D17/34

CPC: B65D17/163

European class: B65D17/16B1

Classification Explorer

Cited documents: US3929252 A, US3868918 A, FR2102290 A1,

Abstract:
Source: EP0648680A1 A closure (10) comprising a ferrous metal easy open food can end has a retention device (40) which engages the rear portion (38) of a ring–pull tab (30). The retention device (40) has a ledge (46) on which the tab sits and a hooked nipple (48) which passes around the inside of the ring–pull. The central panel (20) of the closure is recessed, particularly under the rear portion (38) of the tab, around the retention device (40). During processing of a container to which the closure is fixed, pressure building up inside the container causes the recessed parts (24, 25, 26) to flex outwardly, thus pushing the retention device (40) into further locking engagement with the tab (30). The tab is thus prevented from lifting and/or rotating during the processing procedure.

0) US2004064957A – CAN OPENER

142) Family number: 24155565 (US2004064957A) © PatBase

Title: CAN OPENER

Priority: GB20020022823 20021002

Family:

Publication number	Publication date	Application number	Application date
CN2680644 Y	20050223	CN20032061223U	20030516
GB200222823 A0	20021106	GB20020022823	20021002
GB2393707 A1	20040407	GB20020022823	20021002
GB2393707 B2	20040901	GB20020022823	20021002
US2004064957 AA	20040408	US20030436901	20030513
US6851195 BB	20050208	US20030436901	20030513

Probable Assignee: UNION LUCKY INDUSTRIAL LTD

Assignee(s):(std)**:** SHUN SU ; SO SHUN ; SU SHUN

Assignee(s): UNION LUCKY INDUSTRIAL LTD ; SHUN SO

Inventor(s):(std)**:** SHUN SU ; SO SHUN ; SU SHUN

Inventor(s): SHUN SO

Agent(s): ALIX YALE AND RISTAS LLP

International class (IPC 8–9)**:** B67B7/46 B67B7/70 B67B7/72 B67B7/76 (Advanced/Invention); B67B7/00 (Core/Invention)

International class (IPC 1–7)**:** B67B7/46 B67B7/70 B67B7/72

CPC: B67B7/34

European class: B67B7/34

US class: 30/416 30/418 30/426

Classification Explorer

Cited documents: US6182368 BA, US6058613 A, US5787592 A, US1628080 A, US1443783 A, GB2327662 A1, GB2170172 A1, GB2161449 A1, EP0519646 A2,

Forward Citations: USD583207, USD562658, USD521827, US7784190, US7587831, US7353607, US2013340265, US2012005907, US2011283551, US2008289197, US2008282558, US2006064883,

Abstract:
Source: US2004064957A A can opener includes a body with a handle, a traction wheel rotatably mounted on the body, an operating element for turning the traction wheel, and a cutter. The cutter is moveable between an inoperative position for receiving a rim of a can between the traction wheel and cutter, and an operative position for engaging said rim of the can between the traction wheel and cutter. A cam with a lobe engages the cutter and moves it between the inoperative and operative positions. The cam is operated by a lever.

143) Family number: 33612939 (US2003016845A) © PatBase

Title: IMAGE PROCESSING SYSTEM FOR DYNAMIC SUPPRESSION OF AIRBAGS USING MULTIPLE MODEL LIKELIHOODS TO INFER THREE DIMENSIONAL INFORMATION

Priority:
CA20022387076 20020521
CA20022408122 20021015
US20010023787 20011217
US20010006564 20011105
CA20022414849 20021216
CA20032416478 20030115
US20030457625 20030609
US20010901805 20010710
US20020269237 20021011
US20020269308 20021011
US20020052152 20020117
US20020269357 20021011
US20030375946 20030228
US20010870151 20010530
US20040944482 20040916
US20030703957 20031107
US20030619035 20030714
US20030625208 20030723
US20030663521 20030916

Family:

Publication number	Publication date	Application number	Application date
AU2002306205 AA	20030703	AU20020306205	20021127
AU2003246291 AA	20040429	AU20030246291	20030911
AU2003246335 AA	20040429	AU20030246335	20030915
AU2003248426 AA	20040429	AU20030248426	20030926
AU2004200298 AA	20040916	AU20040200298	20040128
BRPI0202828 A	20030520	BR2002PI02828	20020710
BRPI0205583 A	20040803	BR2002PI05583	20021217
BRPI0303974 A	20040908	BR2003PI03974	20031009
BRPI0303975 A	20040908	BR2003PI03975	20031009
BRPI0303992 A	20040908	BR2003PI03992	20031010
BRPI0400824 A	20050524	BR2004PI00824	20040227
CA2387076 AA	20021130	CA20022387076	20020521
CA2408122 AA	20030505	CA20022408122	20021015
CA2414849 AA	20030617	CA20022414849	20021216
CA2416478 AA	20030717	CA20032416478	20030115
CN1427372 A	20030702	CN20021056649	20021217
CN1525146 A	20040901	CN200410004259	20040216
EP1262376 A1	20021204	EP20020011343	20020523
EP1278159 A2	20030122	EP20020014396	20020628
EP1308894 A2	20030507	EP20020023705	20021023
EP1320069 A2	20030618	EP20020027097	20021204
EP1333403 A2	20030806	EP20030000796	20030114
EP1407940 A2	20040414	EP20030022289	20031002
EP1407941 A2	20040414	EP20030022290	20031002
EP1411474 A2	20040421	EP20030022291	20031002
EP1452399 A2	20040901	EP20040002279	20040203
EP1452399 A3	20050518	EP20040002279	20040203
JP2003025953 A2	20030129	JP20020153859	20020528
JP2003160021 A2	20030603	JP20020200178	20020709
JP2003212081 A2	20030730	JP20020315890	20021030
JP2003233813 A2	20030822	JP20020365186	20021217
JP2003267182 A2	20030925	JP20030009667	20030117
JP2004131078 A2	20040430	JP20030352239	20031010
JP2004133944 A2	20040430	JP20030351150	20031009
JP2004133945 A2	20040430	JP20030351151	20031009
JP2004280812 A2	20041007	JP20040056208	20040301
KR20020091801 A	20021206	KR20020029778	20020529

KR20030007080 A	20030123	KR20020039682	20020709	
KR20030051330 A	20030625	KR20020080134	20021216	
KR20040033255 A	20040421	KR20030070456	20031010	
KR20040033271 A	20040421	KR20030070679	20031010	
KR20040033272 A	20040421	KR20030070688	20031010	
KR20040077533 A	20040904	KR20040013358	20040227	
MXPA02005422 A1	20021209	MX2002PA05422	20020530	
MXPA02006791 A1	20050725	MX2002PA06791	20020710	
MXPA02012538 A1	20030922	MX2002PA12538	20021217	
MXPA03009268 A1	20040716	MX2003PA09268	20031010	
MXPA03009269 A1	20050701	MX2003PA09269	20031010	
MXPA03009270 A1	20041015	MX2003PA09270	20031010	
MXPA04001984 A1	20040902	MX2004PA01984	20040227	
US2003016845 AA	20030123	US20010901805	20010710	
US2003031345 AA	20030213	US20010023787	20011217	
US2003033066 AA	20030213	US20010006564	20011105	
US2003040859 AA	20030227	US20020052152	20020117	
US2003123704 AA	20030703	US20020269237	20021011	
US2003133595 AA	20030717	US20020269357	20021011	
US2003135346 AA	20030717	US20020269308	20021011	
US2003234519 AA	20031225	US20030375946	20030228	
US2004151344 AA	20040805	US20030703957	20031107	
US2004247203 AA	20041209	US20030457625	20030609	
US2005058322 AA	20050317	US20030663521	20030916	
US2005129274 AA	20050616	US20040944482	20040916	
US2005271280 AA	20051208	US20030625208	20030723	
US2008131004 AA	20080605	US20030619035	20030714	
US6459974 BA	20021001	US20010870151	20010530	
US6577936 BB	20030610	US20010006564	20011105	
US6662093 BB	20031209	US20020052152	20020117	
US6853898 BB	20050208	US20020269308	20021011	
US6856694 BB	20050215	US20030703957	20031107	
US6925193 BB	20050802	US20010901805	20010710	
US7116800 BB	20061003	US20010023787	20011217	
US7181083 BB	20070220	US20030457625	20030609	
US7197180 BB	20070327	US20030375946	20030228	
WO04109367 A1	20041216	WO2004IB01814	20040603	
WO05006254 A2	20050120	WO2004IB02267	20040713	
WO05006254 A3	20060323	WO2004IB02267	20040713	
WO05008581 A2	20050127	WO2004IB02347	20040720	
WO05008581 A3	20050414	WO2004IB02347	20040720	
WO05027047 A2	20050324	WO2004IB02922	20040908	
WO05027047 A3	20060427	WO2004IB02922	20040908	
WO05044641 A1	20050519	WO2004IB03632	20041105	

Probable Assignee: EATON CORP

Assignee(s):[(std)]**:** CHEN XUNCHANG ; FARMER MICHAEL EDWARD ; DELL EVA MARK LOUIS ; EATON CORP ; FARMER MICHAEL E ; DELL EVA MARK L ; RESSLER GALEN E ; ST JOHN CHRISTOPHER N ; WEN LI

Assignee(s): GENERAL MOTORS CORP ; AFRIDI KHURRAM KHAN ; AHMED USMAN ; ASIF MUHAMMAD ; BALOCH AIJAZ AHMED

Inventor(s):(std): AFRIDI KHURAM KHAN ; AFRIDI KHURRAM KHAN ; AHMED USMAN ; AIJAZ AHMED BALOCH ; ASIF MUHAMMAD ; BALOCH AIJAZ AHMED ; CHEN XUNCHANG ; CHUAN ZHOU ; DELL EVA MARK L ; DELL EVA MARK LOUIS ; FAMUR M E ; MICHAEL E FARMER ; MICHAEL EDWARD FARMER ; RESSLER GALEN E ; SLICKER JAMES M ; ST JOHN CHRISTOPHER N ; USMAN AHMED ; WEN LI ; FARMER MICHAEL E ; FARMER MICHAEL EDWARD ; JAMES M SLICKER ; ZHOU CHUAN

Inventor(s): ME FAMUR ; M E FAMUR ; LI WEN ; XUNCHANG CHEN ; FARMER MICHAEL

Agent(s): FB RICE; BORDEN LADNER GERVAIS LLP; RADER FISHMAN AND GRAUER PLLC; MARTIN J JAQUEZ ESQ JAQUEZ AND ASSOCIATES

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): B60R11/04 B60R16/02 B60R16/023 B60R21/00 B60R21/01 B60R21/16 B60R22/10 G01B11/00 G01S1/00 G02B27/62 G02B7/00 G06F17/00 G06F7/00 G06K9/00 G06K9/32 G06K9/40 G06K9/62 G06K9/64 G06K9/78 G06Q40/00 G06Q40/04 G06T1/00 G06T3/60 G06T5/00 G06T5/20 G06T5/40 G06T5/50 G06T7/00 G06T7/20 G06T7/40 G06T7/60 H04N17/00 H04N5/225 H04N7/18 (Advanced/Invention);
B60R21/00 B60R21/013 B60R21/0134 B60R21/015 B60R21/16 G06F7/00 G06K9/32 G06T1/00 G06T7/20 (Advanced/Non–invention);
B60R21/00 B60R21/01 B60R21/16 B60R22/00 G01B11/00 G02B27/62 G02B7/00 G06K9/00 G06K9/32 G06K9/40 G06K9/62 G06K9/64 G06T1/00 G06T5/00 G06T7/00 G06T7/20 G06T7/40 G06T7/60 H04N17/00 H04N5/225 (Core/Invention);
B60R21/00 B60R21/013 B60R21/015 (Core/Non–invention)

International class (IPC 1–7): B60R1/00 B60R11/04 B60R21/00 B60R21/01 B60R21/16 B60R21/32 B60R22/00 B60R22/10 E05F15/00 G01B11/00 G01C17/00 G01C19/00 G01C9/00 G01D21/02 G01S1/00 G02B27/62 G02B7/00 G05D1/00 G05D3/00 G06F15/00 G06F17/00 G06F7/00 G06F9/00 G06K9/00 G06K9/32 G06K9/34 G06K9/62 G06K9/78 G06T1/00 G06T3/60 G06T5/00 G06T5/20 G06T5/40 G06T5/50 G06T7/00 G06T7/20 G06T7/40 G06T7/60 G06T9/20 H04N17/00 H04N5/225 H04N7/18

CPC: G02B7/003 G02B27/62 B60R21/01552 B60R21/01556 B60R21/01558 G06T2207/20012 G06K9/6212 G06T7/20 B60R2021/0044 B60R2021/01315 G06K9/00369 G06K9/00832 G06K9/626 G06T2207/10016 G06K9/00362 G06T2207/30268 B60R16/0231 B60R21/013 B60R21/0134 G06K9/6228 G06Q40/04 B60R21/01538 B60R21/0154 G06K9/00838 G06T7/11 G06T7/155 G06T7/215 G06T7/254 G06T7/277 G06T7/70 G06T7/12 G06T7/174 G06T7/74 B60R21/01542 G06T2207/10048 G06K9/3233 G06T2207/20132 G06T2207/20152 G06T2207/30252 G06T7/136 B60R21/16 B60R2021/161 B60R21/01

European class: B60R16/023D B60R21/013 B60R21/015 G02B27/62 G02B7/00C G06K9/00H G06K9/00H1 G06K9/00V7 G06K9/32R G06K9/62A3 G06K9/62B3 G06K9/62B9 G06Q40/04 G06T7/00P G06T7/00P1E G06T7/00S1 G06T7/00S2 G06T7/00S6 G06T7/00S9 G06T7/20 G06T7/20A G06T7/20D G06T7/20K L60R21/00P2C L60R21/013 L60R21/0134 L60R21/013R L60R21/015G6H L60R21/015G7 L60R21/015G9 L60R21/015L L60R21/015N S06T207/10016 S06T207/10048 S06T207/20012 S06T207/20132 S06T207/20148 S06T207/20152 S06T207/30252 S06T207/30268

US class: 180/169 180/268 180/271 180/274 180/274S 280/728.1 280/728.100P 280/728.100S 280/735 280/735S 340/436 340/436S 340/438 358/464 382/103 382/103P 382/104 382/104S 382/106 382/107 382/160 382/171 382/172 382/173 382/173S 382/181 382/181S 382/224 382/224P 382/228 382/255 382/257 382/294 701/28 701/301 701/301S 701/45 701/45P 701/45S 701/47 702/150 702/150P

Classification Explorer

Cited documents: WO8910596 A1, WO03002366 A1, WO0230717 A1, WO0144850 A2, WO0100459 A1, US7164718 BB, US7116800 BB, US7085401 BB, US6801662 BA, US6795567 BA, US6785329 BA, US6777927 BA, US6766036 BA, US6757328 BA, US6757009 BA, US6731799 BA, US6697502 BB, US6697502 BA, US6678058 BB, US6675174 BA, US6662093 BB, US6662093 BA, US6625310 BB, US6625310 BA, US662093 A, US6577936 BB, US6577936 BA, US6529613 BA, US6493620 BB, US6480615 BA, US6459974 BA, US6442465 BB, US6431592 BB, US6421463 BA, US6400831 BB, US6397136 BA, US6363619 BA, US6324453 BA, US6317517 BA, US6307550 BA, US6304833 BA, US6292727 BA, US6272411 BA, US6252240 BA, US6249590 BA, US6244861 BA, US6203059 BA, US6198998 BA, US6188669 BA, US6185314 BA, US6151355 A, US6150955 A, US6137909 A, US6130964 A, US6125339 A, US6116640 A, US6075879 A, US6062340 A, US6055055 A, US6043877 A, US6026340 A, US6018693 A, US6005958 B1, US6005958 A, US5998929 A, US5991410 A, US5983147

B1, US5983147 A, US5982944 A, US5967549 A, US5930379 A, US5923776 A, US5917936 A, US5890085 B1, US5890085 A, US5870722 A, US5832111 A, US5825559 A, US5787425 A, US5715006 A, US5687194 A, US5673365 A, US5627905 A, US5570301 A, US5537204 A, US5531472 A, US5528698 A, US5490069 B1, US5490069 A, US5482314 A, US5454024 A, US5446661 B1, US5446661 A, US5413378 B1, US5413378 A, US5398185 B1, US5398185 A, US5366241 B1, US5366241 A, US5298988 A, US5282204 A, US5280530 A, US5257336 A, US5256904 A, US5229943 A, US5132968 A, US5099322 A, US5074583 B1, US5074583 A, US5051751 B1, US5051751 A, US5005973 A, US4985835 A, US4906940 A, US4690557 A, US4625329 A, US4179696 B1, US4179696 A, US31345 A, US234519 A, US2005169516 AA, US2005131607 AA, US2004151344 AA, US2003234519 AA, US2003215119 AA, US2003209893 AA, US2003135346 AA, US2003133595 AA, US2003125855 AA, US2003123704 AA, US2003063803 AA, US2003040859 AA, US2003033066 AA, US2003031345 AA, US2003016845 AA, US2003 A, US2002169532 AA, US2002164070 AA, US2002133595 AA, US2002085739 AA, US2002000753 AA, US198998 A, US16845 A, US135346 A, US123704 A, JP6166906 A2, JP6166905 A2, JP61066906 A2, JP61066905 A2, GB2236419 A1, GB2231222 A1, EP1167126 A2, EP0908357 A1,

Forward Citations: WO17005916, WO17001070, WO15130928, WO15090570, WO14102428, WO12168766, WO12138343, WO10035839, WO10035839, WO08106804, WO07146629, WO07146629, WO06104602, WO06013198, WO05090118, WO05050278, WO05044641, WO05044640, WO05027047, WO05027047, WO05009805, WO05006254, WO05006254, WO04101325, USD553830, US9679259, US9672289, US9660726, US9655189, US9654163, US9633275, US9626849, US9613423, US9589211, US9586550, US9577760, US9571757, US9561769, US9554064, US9554063, US9553910, US9552222, US9549124, US9544485, US9537968, US9536221, US9497203, US9489745, US9481375, US9469251, US9461748, US9461740, US9455783, US9454820, US9428082, US9424659, US9424277, US9418445, US9418444, US9418441, US9414458, US9413459, US9413457, US9387861, US9386230, US9378421, US9363018, US9361367, US9354722, US9348434, US9342589, US9329701, US9317770, US9311715, US9306966, US9302621, US9294198, US9269265, US9265112, US9258864, US9252883, US9251593, US9251571, US9246594, US9230341, US9213463, US9165368, US9153067, US9142033, US9135802, US9129402, US9123165, US9123136, US9117282, US9117281, US9100124, US9077962, US9065999, US9063834, US9019381, US8971584, US8958955, US8934670, US8931094, US8908997, US8908996, US8903199, US8902076, US8893273, US8890773, US8886045, US8831287, US8818018, US8781171, US8751390, US8744267, US8718143, US8687965, US8615133, US8593299, US8581983, US8571411, US8559699, US8554422, US8544087, US8543505, US8521418, US8520975, US8472721, US8471901, US8467856, US8443441, US8437549, US8437535, US8363908, US8363902, US8358841, US8358691, US8331790, US8320861, US8300892, US8284249, US8270700, US8260048, US8218638, US8213681, US8212897, US8195356, US8188879, US8188878, US8188414, US8180106, US8175385, US8121967, US8107678, US8054193, US8045778, US8009871, US7957597, US7957583, US7953287, US7912285, US7890441, US7889886, US7887089, US7880621, US7873235, US7868922, US7818797, US7787657, US7769513, US7768380, US7765065, US7740096, US7729513, US7692696, US7680342, US7676062, US7660463, US7643035, US7636479, US7636478, US7630804, US7623950, US7620232, US7610127, US7606417, US7583819, US7574018, US7532214, US7525442, US7519565, US7516005, US7505841, US7495547, US7492375, US7480421, US7472922, US7471832, US7469924, US7396320, US7391907, US7359100, US7346188, US7308349, US7283901, US7227626, US7197180, US7181083, US7165785, US7150469, US7139410, US7134688, US7116800, US7113856, US7113079, US7111869, US7009502, US6983638, US6944527, US6925403, US6925193, US6856694, US6853898, US2015310631, US2015310630, US2015287213, US2015089446, US2015010211, US2015010210, US2014321747, US2014320534, US2014316659, US2014288782, US2014118153, US2013245929, US2013155235, US2012143392, US2012140990, US2012123253, US2011207400, US2011157408, US2011153615, US2011134236, US2011102628, US2011091074, US2011091073, US2011044536, US2011025859, US2011013840, US2011002509, US2010329549, US2010295457, US2010245608, US2010182458, US2010169970, US2010154780, US2010118163, US2010104191, US2010092032, US2010087982, US2010060736, US2010053319, US2010002839, US2009319457, US2009315996, US2009279778, US2009273685, US2009259608, US2009244390, US2009238462, US2009174595, US2009157707, US2009129782, US2009123070, US2009110076, US2009099920, US2009086021, US2009040342, US2009033787, US2009033655, US2008292146, US2008246318, US2008188172, US2008181535, US2008181485, US2008154438, US2008131004, US2008059027, US2008051957, US2008050000, US2008025616, US2008021616, US2008004776, US2007282506, US2007276539, US2007269108, US2007239999, US2007213885, US2007193811, US2007147820, US2007127811, US2007124046, US2007124045, US2007124044, US2007124043, US2007120697, US2007102906, US2007096886, US2007085669, US2007055427, US2007025722,

US2007019869, US2007008317, US2006282201, US2006270912, US2006262363, US2006239558, US2006215042, US2006170998, US2006158462, US2006155442, US2006153459, US2006138759, US2006098845, US2006097496, US2006056657, US2006050953, US2006039584, US2006030988, US2006008120, US2006002604, US2005276508, US2005271280, US2005271273, US2005204800, US2005185846, US2005185845, US2005179239, US2005177290, US2005175243, US2005175235, US2005149546, US2005129274, US2005104900, US2005102080, US2005097435, US2005096817, US2005082353, US2005065757, US2005058322, US2005057647, US2005029783, US2005017486, US2004247203, US2004231906, US2004173588, US2004161153, US2004151344, US2004119667, US2004045758, US2004021305, US2004006427, US2003234519, US2003225560, US2003214680, US2003133595, US2003123704, US2003081814, US2003031345, US2003016845, US2002134607, KR101354719, KR100970409, KR100782629, KR100779739, JP5920608, JP4756044, JP2014521990, JP2010087642, JP2006107422, GB2505598, GB2426904, EP2706384, EP2131589, EP2036778, EP2023175, EP1834849, EP1748378, EP1731380, EP1731379, EP1731379, EP1727702, EP1688746, EP1674347, EP1674347, EP1584520, EP1584520, EP1569160, EP1530525, EP1452399, EP1452399, DE112004001341, DE102014017910, DE102004018288, CN105072432, CN104537691, CN104537691, CN103458246, CN103458246, CN103368527, CN102982560, CN102982560, CN102975719, CN102975719, CN102194109, CN102156984,

Abstract:
Source: US2003016845A The present invention relates in general to systems used to determine whether airbag deployment should be disabled or modified due to the proximity of the occupant to the airbag. In particular, the present invention is an image processing system that uses an image and signal process that utilizes real−time streaming video−images from a video camera to determine if the occupant is too close to the air bag, or will be to close the air bag by the time that the airbag deploys. In a crash situation, the system quickly determines whether or not the airbag should be disabled or modified. The process uses a multiple−model Kalman filter to infer three−dimensional information from a sequence of two−dimensional images. The system predicts the position and shape of the occupant at a faster rate than the rate in which the camera collects data.

0) US2013062343A – STRAINER DISPENSER AND METHOD OF USE

144) Family number: 47892114 (US2013062343A) © PatBase

Title: STRAINER DISPENSER AND METHOD OF USE

Priority: EP20100810320 20100616 US20100576283 20100616 WO2010US38834 20100616 WO2009US54103 20090818 US20150833380 20150824 US20120576283 20121121

Family:

Publication number	Publication date	Application number	Application date
DE202010010049 U1	20101209	DE201020010049U	20100709
DE602010029589 D1	20160128	DE201060029589T	20100616
EP2493795 A2	20120905	EP20100810320	20100616
EP2493795 A4	20130508	EP20100810320	20100616
EP2493795 B1	20151216	EP20100810320	20100616
EP3025989 A1	20160601	EP20150003555	20100616
US2013062343 AA	20130314	US20100576283	20100616
US2015360812 AA	20151217	US20150833380	20150824
US9113727 BB	20150825	US20100576283	20100616
WO11021998 A1	20110224	WO2009US54103	20090818
WO11022113 A2	20110224	WO2010US38834	20100616
WO11022113 A3	20110421	WO2010US38834	20100616

Probable Assignee: GERSON CO INC LOUIS M

Assignee(s):(std)**:** BRUNELL ROBERT A ; GERSON CO INC LOUIS M ; GERSON RONALD L ; LAPOINTE PIERRE ; MCCOMBE MICHAEL H

Assignee(s): LOUIS M GERSON CO INC MIDDLEBORO ; LOUIS M GERSON CO INC ; LOUIS M GERSON CO

Inventor(s):(std)**:** BRUNELL ROBERT A ; GERSON RONALD L ; LAPOINTE PIERRE ; MCCOMBE MICHAEL H

Agent(s): MUELLER BORE AND PARTNER PATENTANWAELTE PARTG MBB; MUELLER BORE AND PARTNER PATENTANWAELTE PARTG MBB; OCCHIUTI AND ROHLICEK LLP; OCCHIUTI FRANK ET AL; MCGLASHEN KELLY

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A47F1/08 A47J31/08 B01D29/01 B01D29/085 B01D35/00 B44D3/10 B65B35/50 B65B69/00 B65D1/02 B65D21/02 B65D21/032 B65D25/52 B65D65/02 B65D71/06 B65D75/54 B65D75/58 B65D8/02 B65D83/00 B65D83/08 B65H1/00 (Advanced/Invention); B65D85/62 (Advanced/Non–invention)

CPC: B44D3/10 B05B15/00 B05B15/008 A47F1/085 A47J31/08 B65D75/5833 B65D85/62 B65D2203/02 B65D21/0209 B65D65/02 B65D71/06 B65D75/54 B65D75/58 B65B69/00 Y10T29/49819 B01D29/085

European class: A47F1/08C B01D29/085 B05B15/00 B05B15/00G L05B15/00Y30

US class: 1/1 206/459.5 206/503 220/23.83 220/601 220/608 220/661 220/669 29/426.2 53/447

Classification Explorer

Cited documents: US8152004 BB, US7669732 BB, US7507379 BB, US5532168 A, US5219092 A, US5104538 A, US4484694 A, US4483460 A, US4362624 A, US4239125 A, US4220541 A, US4094443 A, US3987901 A, US3462044 A, US3118565 A, US2896788 A, US2584941 A, US2203494 A, US2013062343 AA, US2005197054 AA, US1762948 A, US1664164 A, US1429701 A, US1151064 A, KR20040105373 A, KR200348289 Y1, KR200348289 Y, KR200348289, KR200345911 Y1, KR200345911 Y, KR200345911, JP2005343475 A2,

Forward Citations: US9573413, US9440485, US8991638, US2015360812, US2013299436, US2013043252,

Abstract:
Source: US2013062343A A method of loading stacked strainers in a dispenser while minimizing strainer contamination is disclosed. The method includes providing a stack of strainers that is enclosed in a protective material to form a pod, placing the pod within a dispenser, and removing the protective material from the pod of strainers while the strainers are in the dispenser. The strainers dispensed from the thus loaded dispenser avoid being contamination during loading. The protective material may be perforated to facilitate removal from the stack, and include an extended portion to be grasped during removal from the dispenser.

0) US5979195A – SEAL ARRANGEMENT BETWEEN INNER AND OUTER TUBS O...

145) Family number: 18832393 (US5979195A) © PatBase

Title: Seal arrangement between inner and outer tubs of a horizontal axis washing machine

Priority: CA19992267744 19990330 US19980079224 19980515

Family:

Publication number	Publication date	Application number	Application date
CA2267744 AA	19991115	CA19992267744	19990330
CA2267744 C	20040427	CA19992267744	19990330
US5979195 A	19991109	US19980079224	19980515

Probable Assignee: MAYTAG CORP

Assignee(s):(std): MAYTAG CORP

Assignee(s): VANDE HAAR EVAN R ; VAN DRIMMELEN THEODORE R ; SMOTHERS LOUIS R ; WHITE WILLIAM R ; BESTELL GARY D ; JOHNSON TROY A

Inventor(s):(std): BESTELL GARY D ; JOHNSON TROY A ; SMOTHERS LOUIS R ; VAN DRIMMELEN THEODORE R ; VANDE HAAR EVAN R ; WHITE WILLIAM R

Agent(s): FINLAYSON AND SINGLEHURST

International class (IPC 8–9): D06F37/04 D06F37/22 D06F37/26 (Advanced/Invention); D06F37/00 (Core/Invention)

International class (IPC 1–7): D06F37/04 D06F37/22

CPC: D06F37/265 D06F37/266

European class: D06F37/26C D06F37/26G

US class: 68/139 68/23.2 68/24

Classification Explorer

Cited documents: US3276229 A, US3089327 A, US2970717 A, US2966052 A, US2613837 A, GB2114606 A1,

Forward Citations: WO12015900, WO12015900, WO11138121, USRE44795, USRE44674, USRE44511, USRE44028, USRE43625, USD474313, US9580856, US9080278, US8931312, US8887538, US8887537, US8800326, US8783072, US8746017, US8726702, US8677787, US8671719, US8671718, US8646293, US8646292, US8616027, US8434334, US8429938, US8387421, US8341983, US8336340, US8336339, US8322170, US8302434, US8276407, US8234890, US8225628, US8220294, US8201422, US8186185, US8166782, US8156770, US8087267, US8011211, US7930910, US7849716, US7841220, US7827834, US7827833, US7607326, US7571625, US7568366, US7533548, US7012350, US6897591, US6744166, US6700284, US6681602, US6615619, US6597078, US6584813, US6487769, US6256823, US2017044707, US2012024018, US2011214459, US2011214458, US2010326141, US2010139074, US2010116005, US2007051142, US2007017261, US2006243003, US2006169006, US2006016228, US2005252252, US2005229651, US2004123631, EA021197, CN102884241, CN102884241,

Abstract:
Source: US5979195A A sealing device is provided to bridge a gap defined between open frontal portions of inner and outer tubs of a horizontal axis washing machine in order to prevent foreign objects from getting into the outer tub from the inner tub through the gap and potentially clogging a pumping system of the machine. In the preferred form of the invention, the sealing device includes a first seal portion fixedly secured to a lower, inner wall portion of a cover attached to the outer tub and a flexible, second seal portion which extends toward and preferably slidably contacts a balance ring provided about the open frontal portion of the inner tub. In accordance with one embodiment, the sealing device is constituted by a brush member, with the second seal portion being defined by bristles of the brush member. In another embodiment, the sealing device is constituted by a plastic film having one longitudinal side secured to the outer tub cover and another longitudinal side in sliding contact with the balance ring.

146) Family number: 29689658 (GB519446A) © PatBase

Title: Improvements relating to a machine for preparing cans or like containers for filling

Family:

Publication number	Publication date	Application number	Application date
GB519446 A	19400327	GB19380027755	19380923

Probable Assignee: AMERICAN CAN CO

Assignee(s):(std)**:** AMERICAN CAN CO

Assignee(s): AMERICAN CAN COMPANY

International class (IPC 8–9): B67C3/04 (Advanced/Invention)

International class (IPC 1–7): B67C3/04

CPC: B67C3/04

European class: 64B19 B67C3/04

Classification Explorer

Abstract:
Source: GB519446A 519,446. Bottling; opening bottles; embossing. AMERICAN CAN CO. Sept. 23, 1938, No. 27755. Convention date, Nov. 5, 1937. [Class 125 (ii)] [Also in Group XVI] A machine for preparing for filling cans and c. having attached closure elements in container sealing position, comprises feeding devices for advancing containers along a predetermined path of travel, a suction lifting device for moving the closure elements from container sealing position to open position, and having mechanism for cutting off the suction to release the closure elements when in open position, a closure element holding device movable into a position to hold the closure elements open on release from the suction device, a guide for retaining the closure elements in open position during further advancement of the containers by the feeding device and driving mechanism for operating the feeding devices, the suction lifting device and the holding device in timed relation with one another. The closures may be of the kind described in Specifications 470,098, and 470,174, i.e. having a plug e hinged at a staple g and a tab f for carryng the container. Fibre cans, having the closures hermetically sealed thereon, lie on their sides stacked in a magazine A. A can–feeder C, controlled by a can–detector B, pushes the lowermost can into a swastikashaped can–setting–up member D. A plunger E pushes the upright can out of the member D to a position in front of a pusher F which pushes the can into a pocket 221 in an intermittentlyrotating turret H. As the can is pushed on to the turret a device G raises he tab f. The can is then carried past (a) a steam–heated tabmarking mechanism J which embosses, e.g., " Monday" on the tab, (b) a suction device K which raises the plug e, (c) an arm 371 which holds the plug open while the suction device is releasing the plug, (d) a rail 378 which holds the plug open when the arm 371 has released it and (e) a can–rejector L which diverts cans having unopened or improperly–opened plugs through a gap 429 in the turret guide 236. A transfer device M pushes the can out of its pocket into a pocket 495 of a rotary filling machine N. The can–detector B comprises a reciprocating rod 59 carrying a bell–crank lever 88 one arm of which engages a pin 86 and the other arm of which carries pins 111, 112. As the rod 59 moves to the right, Fig. 10, the pin 86 enters a hole 87 in the magazine A. Normally the pin abuts against a can and the lever 88 is thus rocked anti–clockwise. The can–feeder C comprises a reciprocating slide 118 on which is superposed a can–engaging head 117 carrying pawls 114, 115 which are normally (i.e. when there is a regular feed of properly positioned cans down through the magazine A) locked together as shown in Fig. 13, a driving lug 128 on the pawl 114 transmitting motion from the slide 118 to the head 117. If, however, the plunger 86 does not meet a can the shot pin 112 is aligned with the pawl 115 and, as the rod 59 moves to the right, this pin tilts the pawl 115 on its pivot 116, thus disengaging the pawls, a spring–pressed plunger 125 pivoting the pawl 114 so that its lug 128 moves into an "idle" notch 136. The pawls are re–set, when the plunger 86 meets a can, by the long pin 111, which is at such times aligned with the pawl 114. The plunger E is secured to and moves with the slide 118. The tab–raising device G comprises a lever 185 pivoted at 181 and having at one end a wedge–shaped blade 186 and at the other a rod 187 connected to a spring (not shown) which tends to keep the lever 185 in the position shown. The plunger E pushes the can against a plunger device 191 which engages the rod 187 and rocks the lever 185 clockwise so that the blade 186 rests on the can top near the tab f. The tab–marking mechanism J comprises two jaws, one 245 being stationary and the other 247 being pivoted at 248 and forced downward by the toggle arrangement shown. These jaws are carried on a hollow steam–heated arm 241 which is periodically rocked into tab–engaging position. During marking the can is held at a corner by an angular clamping plate 305. The suction device K comprises a suction cup 315 mounted on a curved rack 317 meshing with a pinion 325 oscillated by a straight rack 332. The rack has rotated from the dotted line position to the full line position and has released the plug. The can–rejector L comprises a detecting pin 381 mounted to move with a vertically reciprocating shaft 384. If the pin, –on its downward movement, meets an unopened, or imperfectly–opened plug e an arm 383 rocks a bell–crank 435 clockwise, thus shifting a plate 442 to the left, releasing a lug 455 and allowing a spring 461 to press a driving finger 462 into a notch 463 of an oscillating sleeve 386. This sleeve thus transmits its motion to the bushing 422 on which the finger 462 is mounted and the bushing

shifts can–deflecting segments 428 into the path of the can.

147) Family number: 14557510 (US5788139A) © PatBase

Title: Stitching machine head and wire cassette therefor

Priority: GB19970007021 19970407 US19960628946 19960408

Family:

Publication number	Publication date	Application number	Application date
DE19714482 A1	19971106	DE19971014482	19970408
DE19714482 B4	20090910	DE19971014482	19970408
GB2311954 A1	19971015	GB19970007021	19970407
GB2311954 B2	20000405	GB19970007021	19970407
GB2340429 A1	20000223	GB19990022478	19970407
GB2340429 B2	20000628	GB19990022478	19970407
GB9707021 A0	19970528	GB19970007021	19970407
GB9922478 A0	19991124	GB19990022478	19970407
US5788139 A	19980804	US19960628946	19960408

Probable Assignee: SAMUEL STRAPPING SYSTEMS INC

Assignee(s):(std): CASS STRAPPING CORP ; SAMUEL STRAPPING SYSTEMS INC

Assignee(s): CASS STRAPPING CORP STERLING HEIGHTS MICH US ; INTERLAKE COMPANIES INC

Inventor(s):(std): SIKORA LARRY A

Inventor(s): SIKORA LARRY A RACINE WIS US ; LARRY A SIKORA

International class (IPC 8–9): B27F7/17 B27F7/28 (Advanced/Invention); B27F7/00 (Core/Invention)

International class (IPC 1–7): B25C5/00 B25C5/04 B27F7/21 B27F7/23 B27F7/28

CPC: B27F7/28

European class: B27F7/28

US class: 227/82 227/84 227/88 227/97 242/562 242/563.1

Classification Explorer

Cited documents: US592453 A, US5150826 A, US5147080 A, US4898314 A, US4807829 A, US4722467 A, US4570870 A, US4542844 A, US4531682 A, US4516713 A, US4505415 A, US4386744 A, US4085492 A, US4053094 A, US3982402 A, US3642187 A, US3006567 A, US2960280 A, US2957638 A, US2873927 A, US2701360 A, US2697829 A, US2640659 A, US2636168 A, US2523571 A, US2442933 A, US1991263 A, US1934104 A, US1708730 A, GB659363 A, EP0365457 A2, EP0104076 A2, DE1135861 B, DE1024913 B,

Forward Citations: WO10048135, WO10048135, WO0166297, US8157202, US8157143, US8132753, US7938351, US7658308, US7537144, US7140609, US7032898, US6837416, US6726079, US6547230, US5938100, US2011180652, US2011174915, US2010096485, US2008245838, US2007062426, US2006071403, US2004094883, EP1591029, EP1591029, DE102012215560, DE102007019009, DE102007019009, DE102005042517, CN102430998,

Abstract:
Source: US5788139A A supply wire cassette is removably mounted on the face plate of a wire stitching machine head. The cassette carries a rotatable reel of wire from which wire is unreeled over a flexible, resilient brake lever through a check pawl and a guide tube, which guides the unreeled wire along an arcuate, wire–straightening path to an outlet at a cutter on the head. A wire holder is removably mounted on the cassette housing and holds the free end thereof in position at the outlet until the cassette is mounted on the face plate to ensure that the wire passes through the feed mechanism of the head. Actuation of the feed mechanism withdraws wire from the cassette, pivoting the brake lever to unbrake the supply reel. When a predetermined length of unreeled wire accumulates in the cassette housing, the brake lever is biased back into braking engagement with the reel. A sensor including a switch removably mounted in the cassette housing indicates when the supply reel is nearly empty.

0) GB1076000A – CANS WITH TEARING TABS

148) Family number: 25111576 (GB1076000A) © PatBase

Title: CANS WITH TEARING TABS

Priority: CH19640015894 19641209 CH19650016042 19651122

Family:

Publication number	Publication date	Application number	Application date
BE673434 A	19660401		19651208
CH424517 A	19661115	CH19640015894	19641209
CH444697 A	19670930	CH19650016042	19651122
DE1482587 A1	19690403	DE19651482587	19651209
GB1076000 A	19670719	GB19650052365	19651209
NL6516036 A	19660610	NL19650016036	19651209

Probable Assignee: ALUSUISSE

Assignee(s):(std)**:** ALUSUISSE

Assignee(s): SCHWEIZERISCHE ALUMINIUM AG ; SWISS ALUMINIUM LTD

Inventor(s):(std)**:** BLOECK SIEGFRIED ; MARIUS ROUILLER ; PETER WOLFF DIPL ING ; ROUILLER MARIUS ; SIEGFRIED BLOECK ; WOLF PETER DIPL ING

International class (IPC 8–9)**:** B21D39/03 B21D51/38 B21D51/44 B21K25/00 B65D1/16 B65D17/34 B65D17/40 E03F3/04 (Advanced/Invention); B21D51/38 B21K25/00 B65D1/00 B65D17/28 E03F3/04 (Core/Invention); B67B (Subclass/Invention)

International class (IPC 1–7)**:** B21D51/44 B65D17/34 B67B

CPC: B65D17/16 B65D17/165 B21D51/383

European class: B21D51/38B B65D17/16 B65D17/16B2

Classification Explorer

Forward Citations: EP0531619, EP0531619,

Abstract:
Source: GB1076000A 1,076,000. Making cans; extruding. SWISS ALUMINIUM Ltd. Dec. 9, 1965 [Dec. 9, 1964; Nov. 22, 1965], No. 52365/65. Headings B3A and B3P. [Also in Division B8] A metal can 3 with a tearing tab 6, Figs. 4, 5 (not shown), is made by impact extruding a can body with a projecting stud 4 at one end, placing an apertured tab over the stud and deforming the latter. The extrusion is performed by a convex punch having an end valve through which compressed air is admitted for removing the extruded body. The end may be left convex or may be pushed inwardly to concave form 2, Fig. 4 (not shown). After placing the apertured tab over the stud the latter is deformed by a rotating or vibrating punch 5, 10, Figs. 3, 7 (not shown). The tab may be turned inwardly at 15, Fig. 8 (not shown), or it may have a sharp edge 16, Fig. 10 (not shown), to facilitate tearing of the can along tear lines such as 11, 13, 17, Fig. 5 (not shown). These tear lines are formed by stamping in a die preferably in the inside of the can end 2 and may be deepest near the stud. Surface treatment such as lacquering the inside of the can may be performed before or after securing the tab. After filling the can, a cover is applied to the end opposite the tab.

0) US2013075418A – PILL DISPENSER

149) Family number: 53291856 (US2013075418A) © PatBase

Title: PILL DISPENSER

Priority: US20110246083 20110927

Family:

Publication number	Publication date	Application number	Application date
US2013075418 AA	20130328	US20110246083	20110927
US8794482 BB	20140805	US20110246083	20110927
WO13049277 A1	20130404	WO2012US57442	20120927

Probable Assignee: ANDERSONBRECON INC

Assignee(s):(std)**:** KNUTSON CURTIS A ; SACK RYEN ; MOYER THOMAS ; ANDERSON PACKAGING INC ; ANDERSONBRECON INC

Assignee(s): GENERAL ELECTRIC CAPITAL CORP ; PACKAGING COORDINATORS LLC ; ROYAL BANK OF CANADA AGENT AS

Inventor(s):(std)**:** KNUTSON CURTIS A ; MOYER THOMAS ; SACK RYEN

Agent(s): HOWSON AND HOWSON LLP; BAK WILLIAM ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A61J7/00 B23P11/00 B65D83/04 B65G59/00 (Advanced/Invention)

CPC: A61J7/0084 A61J7/0076 B65D83/0445 B65D83/0454 B65D2215/06 Y10T29/49826

US class: 221/268 221/74 221/80 221/87 221/92 221/93 29/428

Classification Explorer

Cited documents: USD642467 S1, US8205752 BB, US7967144 BB, US7900772 BB, US7896161 BB, US7806270 BB, US7617935 BB, US7581642 BB, US7353969 BB, US7243797 BB, US7147127 BB, US7100793 BB, US6726058 BB, US6325241 BA, US5381904 A, US5379899 A, US4887790 A, US4872559 A, US4741441 A, US4693371 A, US4555044 A, US4372445 A, US4164301 A, US4124143 A, US4078661 A, US4069942 A, US4062445 A, US4038937 A, US3984031 A, US3807551 A, US2011215022 AA, US2011186469 AA, US2011068039 AA, US2009200330 AA, US2004169049 AA, US2004074917 AA, FR2956027 A1,

Forward Citations: US2014305833, US2014026521, EP3120826,

Abstract:
Source: US2013075418A Dispensers for packaging solid unit dosage forms, e.g., tablets, are described herein, the dispensers employing a deformable elastomeric wiper seal between a cover and a base. The cover is linearly or rotatably slidable relative to the base to seal and/or expose the compartments of the base.

0) US3166879A – WRAP–AROUND CARTON LOADER

150) Family number: 22511372 (US3166879A) © PatBase

Title: WRAP–AROUND CARTON LOADER

Priority: US19620208360 19620709

Family:

Publication number	Publication date	Application number	Application date
US3166879 A	19650126	US19620208360	19620709

Probable Assignee: CONTAINER CORP

Assignee(s):(std)**:** CONTAINER CORP

Assignee(s): CONTAINER OF AMERICA CORP

Inventor(s):(std)**:** BUDZYNSKI LOUIS R ; CHIDSEY JR FRANCIS A ; NIGRELLI BIAGIO J ; STANDLEY WENDELL E

Inventor(s): JR FRANCIS A CHIDSEY

International class (IPC 8–9): B65B11/10 (Advanced/Invention); B65B11/06 (Core/Invention)

CPC: B65B11/105

European class: B65B11/10B

US class: 53/378.3 53/48.7 53/48.9

Classification Explorer

Cited documents: US3060659 A, US3016663 A, US2974454 A, US2900772 A, US2685993 A,

Forward Citations: US9573744, US9499319, US9487320, US9481501, US9346574, US9346573, US9284084, US9233769, US9205939, US5154039, US4159609, US4057950, FR2664564, EP0466599, DE1288971,

Abstract:
Source: US3166879A (Claim 1) 1. Mechanism for enclosing a group of chimed cans within an elongated paperboard blank of the type having a central panel, side wall panels on opposite sides of the central panel and top panels on each of the side wall panels at the ends of the blank, the central panel having hinged, chime engaging, retaining tabs formed within the contour of such panel adjacent its free edges, conveying means for advancing a flat, unfolded blank of the type defined at a fixed speed in a direction transverse to its length with the retaining tabs displaced upwardly of the blank, means for supporting and convey– ing chimed cans successively in upright position at a speed timed with the blank travel and in an oblique path relative to the direction of travel of the blanks, said supporting means delivering the cans with their lower ends moving in a plane slightly above the plane of travel of ^0 the unfolded blanks to deposit cans upright upon the central panel of the blank, and opposed guide means disposed in fixed position over the path of the advancing blank and engaging laterally upon opposite surfaces of the cans to direct the leading portions of individual cans in their oblique movement against individual, upwardly displaced tabs to fold an engaged tab through the remainder of 180 degrees of movement as the can is transferred from the supporting means onto the blank and into position over its tab with the inner surface of the can chime in engaging relation to its tab.

0) US3478917A – REINFORCED BEAD FOR A TAB OPENING CAN

151) Family number: 889343 (US3478917A) © PatBase

Title: REINFORCED BEAD FOR A TAB OPENING CAN

Priority: US19670635059 19670501

Family:

Publication number	Publication date	Application number	Application date
US3478917 A	19691118	US19670635059	19670501

Probable Assignee: AMERICAN CAN CO

Assignee(s):(std)**:** AMERICAN CAN CO

Inventor(s):(std)**:** ROUSE JOHN WILSON ; SIMMONS HARLEY EARL

Inventor(s): HARLEY EARL SIMMONS ; JOHN WILSON ROUSE

International class (IPC 8–9)**:** B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7)**:** B65D17/24 B65D17/34

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/273 220/54 D9/438

Classification Explorer

Cited documents: US3401822 A, US3349949 A, US3339790 A, US3315837 A, US3303959 A, US3250426 A,

Forward Citations: US7846555, US4624387, US3900128, US2008100097, US2007296249,

Abstract:
Source: US3478917A ABSTRACT OF THE DISCLOSURE A tab opening can having a removable section which t–.nds to bend or crease to an extent likely to result in fracture when it is being torn from the can, is provided with a reinforcing bead at the location where said crease or fold is likely to occur to thereby prevent the crease or fold from becoming sharp enough to result in ftacture. B

152) Family number: 1452927 (US4053981A) © PatBase

Title: Power operated can opener having automatic shutoff means, a removable hand lever assembly, and a manual crank

Priority: US19760677501 19760415

Family:

Publication number	Publication date	Application number	Application date
US4053981 A	19771018	US19760677501	19760415

Probable Assignee: RIVAL MANUFACTURING CO

Assignee(s):(std)**:** RIVAL MANUFACTURING CO ; RIVAL MFG CO

Assignee(s): RIVAL MANUFACTURING COMPANY ; RIVAL MFG

Inventor(s):(std)**:** ABERER JAMES B

International class (IPC 8–9)**:** B67B7/70 (Advanced/Invention); B67B7/00 (Core/Invention)

International class (IPC 1–7)**:** B67B7/38

CPC: B67B7/38

European class: B67B7/38

US class: 30/419 30/421 30/424 30/426

Classification Explorer

Cited documents: US3949468 A, US3818589 A, US3733698 A, US3688400 A, US2794245 A,

Forward Citations: USD444686, US9221665, US8443518, US6845562, US6516524, US6510613, US6189221, US6119352, US5992026, US5313708, US5289638, US4207676, US2009235537, US2004093744,

Abstract:
Source: US4053981A A motor driven can opener includes a pivotal hand lever assembly which may be removed from the can opener frame. A latch on the frame engages an edge portion of the hand lever to retain the lever on the frame throughout its normal operating range. A plate on which a can cutting element is carried is mounted to slide on the forward surface of the lever. A tab projects from the plate and catches on a hardened steel pin of the frame to hold the hand lever against the actuator of a rotary switch which maintains the motor in its energized condition during shearing of a can lid. When the can shearing is completed, the tab releases from the pin to automatically deenergize the motor.

0) NL1008675C – BEVERAGE CAN FOR E.G. SOFT DRINKS OR BEER BLIK...

153) Family number: 14640158 (NL1008675C) © PatBase

Title: Beverage can for e.g. soft drinks or beer

Priority: NL19971007002 19970911 NL19981008675 19980323

Family:

Publication number	Publication date	Application number	Application date
NL1008675 C2	19990312	NL19981008675	19980323

Probable Assignee: ADRIANUS ANTONIUS GEERTRUDA VE

Assignee(s):(std)**:** ADRIANUS ANTONIUS GEERTRUDA VE

Assignee(s): VERKENNIS ADRIANUS ANTONIUS GEERTRUDA

Inventor(s):(std)**:** VERKENNIS ADRIANUS ANTONIUS GE ; BONGERS CORNELIS MARGARETHA TH

Inventor(s): CORNELIS MARGARETHA THEODORUS MARIA BONGERS ; ADRIANUS ANTONIUS GEERTRUDA VERKENNIS

International class (IPC 8–9): B65D17/347 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/347

CPC: B65D17/166 B65D2517/0014 B65D2517/0023 B65D2517/0034

European class: B65D17/16B2B L65D517/00Y2C L65D517/00Y3A L65D517/00Y5A1

Classification Explorer

Forward Citations: WO05037665, US9517866, ES2251872, ES2249964, ES2246665,

Abstract:
The bridge part of the ring–pull divides the closure tab into at least two parts which break apart and bend when the lip around the bridge part is bent. A tab (5) formed in one of the end walls (3) of the can (1) is also joined to the end wall by a bridge formed by a relatively thin region of the end wall. A bendable lip is joined to the can end wall close to the tab, a small lip section being on one side of the join, and a large lip section being on the other side. Bending the large lip section in the opposite direction to the can end wall forces the small lip section to be bent in towards the end wall and against the tab, breaking it open.

0) US2009287127A – CIRCUMFERENTIAL WALKER

154) Family number: 44005484 (US2009287127A) © PatBase

Title: CIRCUMFERENTIAL WALKER

Priority:

EP20090746980 20090515 US20080054764P 20080520 US20080071747P 20080515
US20080054766P 20080520 US20080071829 20080520 US20080071747 20080515
US20080071829P 20080520 US20080099017P 20080922 US20090466577 20090515
US20080092297P 20080827 US20090466597 20090515 US20090563386 20090921
US20080099017 20080922 US20110307795 20111130 WO2009US03018 20090515
WO2009US03021 20090515 US20130951933 20130726 US20140212936 20140314
US20140513406 20141014 US20150792729 20150707 US20150856871 20150917

Family:

Publication number	Publication date	Application number	Application date
CN102026592 A	20110420	CN200980116845	20090515
CN102026592 B	20130501	CN200980116845	20090515
CN102026594 A	20110420	CN200980117374	20090515
CN102026594 B	20131225	CN200980117374	20090515
DE602009035257 D1	20160128	DE200960035257T	20090515
EP2317960 A1	20110511	EP20090746982	20090515
EP2326293 A1	20110601	EP20090746980	20090515
EP2326293 B1	20151216	EP20090746980	20090515
EP3034051 A1	20160622	EP20150200198	20090515
US2009287127 AA	20091119	US20090466577	20090515
US2009287128 AA	20091119	US20090466597	20090515
US2010234782 AA	20100916	US20090563386	20090921
US2012078148 AA	20120329	US20110307795	20111130
US2013310721 AA	20131121	US20130951933	20130726
US2014197565 AA	20140717	US20140212936	20140314
US2015032041 AA	20150129	US20140513406	20141014
US2015305912 AA	20151029	US20150792729	20150707
US2016000596 AA	20160107	US20150856871	20150917
US8002724 BB	20110823	US20090466577	20090515
US8506510 BB	20130813	US20090563386	20090921
US8858482 BB	20141014	US20090466597	20090515
US9220621 BB	20151229	US20140212936	20140314
US9333106 BB	20160510	US20110307795	20111130
US9468553 BB	20161018	US20150792729	20150707
US9492301 BB	20161115	US20130951933	20130726
WO09139893 A1	20091119	WO2009US03018	20090515
WO09139895 A1	20091119	WO2009US03021	20090515

Probable Assignee: OSSUR HF

Assignee(s):(std)**:** EINARSSON PALMI ; HU IRVING ; INGIMUNDARSON ARNI THOR ; LEE JANE ; OSSUR AMERICAS INC ; OSSUR HF

Assignee(s): KAUPTHING BANK HF

Inventor(s):(std)**:** EINARSSON PALMI ; HU IRVING ; INGIMUNDARSON ARNI THOR ; IRVING HU ; JANE LEE ; LEE JANE ; PALMI EINARSSON ; THOR INGIMUNDARSON ARNI

Agent(s): KLUNKER SCHMITT NILSON HIRSCH; BIRD WILLIAM EDWARD; DENK IP; BACON AND THOMAS PLLC; WORKMAN NYDEGGER; CASSELL JUSTIN J ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE

NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A61F13/04 A61F5/00 A61F5/01 A61F5/02 A61F5/37 A61H3/00 (Advanced/Invention); A61F5/00 A61F5/01 (Core/Invention)

CPC: A61F5/0123 A61F5/022 A61F5/0102 A61H3/00 A61F2250/001 A61F5/0111 A61F5/0127 A61F5/0195 A61F5/012 A61F5/01

European class: A61F5/01D1D A61F5/01D3 A61F5/01P A61F5/02D

US class: 1/1 128/882 264/161 264/271.1 36/140 602/12 602/13 602/13P 602/16 602/16S 602/23 602/27 602/27P 602/27S 602/28

Classification Explorer

Cited documents: WO9736507 A1, WO9703581 A1, WO9503720 A2, WO9418863 A1, WO9324081, WO9313685 A1, WO15006766 A1, WO13084213 A1, WO10104824 A1, WO07078845 A2, WO07016983, WO06045079 A1, WO06035469 A2, WO04110197 A2, WO04021817 A1, WO0053045 A1, USRE40363 E, USRE37338 E, USD714042 S1, USD712639 S1, USD703335 S1, USD701033 S1, USD701032 S1, USD698338 S1, USD698074 S1, USD696785 S1, USD696499 S1, USD683214 S1, USD682517 S1, USD680728 S1, USD677866 S1, USD675421 S1, USD661887 S1, USD651381 S1, USD648113 S1, USD642775 S1, USD642363 S1, USD636159 S1, USD636157 S1, USD634852 S1, USD634438 S1, USD622494 S1, USD616556 S1, USD615285 S1, USD614775 S1, USD603155 S1, USD596386 S1, USD596301 S1, USD592756 S1, USD592755 S1, USD583956 S1, USD575039 S1, USD555343 S1, USD554835 S1, USD528214 S1, USD521644 S1, USD520141 S1, USD519637 S1, USD505727 S1, USD500855 S1, USD476799 S1, USD473704 S1, USD473654 S1, USD467708 S1, USD418967 S1, USD404895 S1, USD401042 S1, USD398439 S1, USD398142 S1, USD391748 S1, USD390345 S1, USD384746 S1, USD383250 S1, USD379258 S1, USD376429 S1, USD375191 S1, USD373548 S1, USD365919 S1, USD363780 S1, USD352784 S1, USD352191 S1, USD344589 S1, USD337876 S1, USD334646 S1, USD330109 S1, USD329527 S1, USD299787 S1, USD272281 S1, US975576 A, US9333106 BB, US8574181 BB, US8506510 BB, US8313449 BB, US8308705 BB, US8158844 BB, US8091182 BB, US8038637 BB, US8038635 BB, US8021347 BB, US8012112 BB, US8002724 BB, US7993296 BB, US7964766 BB, US7954204 BB, US7950112 BB, US7922680 BB, US7887500 BB, US7878998 BB, US7862621 BB, US7857776 BB, US7838717 BB, US7806842 BB, US7727174 BB, US7717869 BB, US7704219 BB, US7699797 BB, US7670306 BB, US7618389 BB, US7618386 BB, US7617573 BB, US7600660 BB, US7591050 BB, US7524295 BA, US7513018 BB, US7493706 BB, US7438698 BB, US7418755 BB, US7416565 BA, US7404804 BB, US7402147 BA, US7384584 BB, US7354411 BB, US7331126 BB, US7311686 BA, US7306573 BB, US7303538 BB, US7288076 BB, US7281341 BB, US7235059 BB, US7207126 BB, US7198610 BB, US7134224 BB, US7128724 BB, US7018351 BA, US7010823 BB, US6991613 BB, US6976972 BB, US6945944 BB, US6921377 BB, US6866043 BA, US6827653 BB, US6792699 BB, US6770047 BB, US6769155 BB, US6755798 BB, US6711787 BB, US6689080 BB, US6682497 BB, US6589194 BA, US6572571 BB, US6503213 BB, US6502577 BA, US6432073 BB, US6416074 BA, US6413232 BA, US6409691 BA, US6377178 BA, US6361514 BA, US6338768 BA, US6334854 BA, US6289558 BA, US6267742 BA, US6267390 BA, US6256798 BA, US6228044 BA, US6206932 BA, US6205685 BA, US6202953 BA, US6159248 A, US6098315 A, US6044578 A, US6027468 A, US6021780 A, US6000148 A, US5993404 A, US5961477 A, US5951504, US5934599 A, US5913841 A, US5891061 A, US5868690 A, US5857987 A, US5853380 A, US5848979 A, US5846063 A, US5836902 A, US5833639 A, US5827211 A, US5827210 A, US5819378 A, US5797862 A, US5778565 A, US5778563 A, US5761834 A, US5737854 A, US5732483 A, US5717996 A, US5685830 A, US5669116 A, US5656226 A, US5647104 A, US5641322 A, US5638588 A, US5617650 A, US5599288 A, US5577998 A, US5548848 A, US5502902 A, US5496263 A, US5483757 A, US5477593 A, US5464385 A, US5441015 A, US5438768 A, US5437619 A, US5435009 A, US5433695 A, US5433648 A, US5429588 A, US5426872 A, US5425701 A, US5407421 A, US5399152 A, US5378223 A, US5370133 A, US5368551 A, US5368549 A, US5365947 A, US5359791 A, US5346461 A, US5329705 A, US5327662 A, US5325613 A, US5319868 A, US5288286 A, US5277695 A, US5249377 A, US5242379 A, US5233767 A, US5197942 A, US5183036 A, US5181331 A, US5177882 A, US5176624 A, US5176623 A, US5157813 A, US5154695 A, US5154682 A, US5152038 A, US5143058 A, US5125400 A, US5123180 A, US5117567 A, US5092321 A, US5078128 A, US5065531 A, US5065481 A, US5062225 A, US5042177 A, US4974583 A, US4961544 A, US4947838 A, US4934355 A, US4893418 A, US4884760 A, US4879822 A, US4872273 A, US4869001 A, US4841649 A, US4811504 A, US4811503 A, US4805601 A, US4805321 A, US4802291 A, US4799297 A, US4793078 A, US4773170 A, US4771768 A, US4760653 A, US4748726 A, US4741115 A, US4727661 A, US4719710 A, US4719709 A, US4719670 A, US4689898 A, US4680878 A, US4677767 A, US4674205 A, US4674204 A, US4669202 A, US4660302

A, US4660300 A, US4654985 A, US4633877 A, US4633599 A, US4633598 A, US4631840 A, US4631839 A, US4620378 A, US4619657 A, US4616524 A, US4608768 A, US4599811 A, US4598484 A, US4587962 A, US4574500 A, US4572169 A, US4571853 A, US4565017 A, US4555830 A, US4551932 A, US4550721 A, US4505269 A, US4494536 A, US4446856 A, US4433456 A, US4414965 A, US4408402 A, US4370818 A, US4333248 A, US4300294 A, US4267649 A, US4261081 A, US4237626 A, US4232459 A, US4217893 A, US4217706 A, US4184273 A, US4177583 A, US4142307 A, US4100686 A, US4095353 A, US4057056 A, US4045888 A, US3955565 A, US3926182 A, US3922800 A, US3889664 A, US3859740 A, US3834377 A, US3814088 A, US3808644 A, US3793749 A, US3792537 A, US3786805 A, US3760056 A, US3735758 A, US3730169 A, US3685176 A, US3681860 A, US3580248 A, US3548420 A, US3464126 A, US3270358 A, US2979836 A, US2979835 A, US2928193 A, US2917844 A, US2913837 A, US2909854 A, US2888016 A, US2885797 A, US2868191 A, US2444640 A, US2292297 A, US2236367 A, US2200849 A, US2070093 A, US2014276310 AA, US2014171837 AA, US2013310721 AA, US2013066247 AA, US2012238924 AA, US2012220960 AA, US2012078148 AA, US2012035560 AA, US2012029404 AA, US2012010547 AA, US2011266384 AA, US2011197362 AA, US2011184326 AA, US2011178448 AA, US2011144554 AA, US2011098618 AA, US2011082402 AA, US2011046528 AA, US2011015555 AA, US2011009791 AA, US2010324461 AA, US2010299959 AA, US2010274364 AA, US2010268139 AA, US2010234782 AA, US2010139057 AA, US2010100020 AA, US2010069808 AA, US2009287128 AA, US2009287127 AA, US2009270820 AA, US2009099495 AA, US2009090026 AA, US2009030353 AA, US2009012482 AA, US2008319362 AA, US2008294083 AA, US2008294082 AA, US2008091132 AA, US2008083135 AA, US2008066346 AA, US2008066345 AA, US2008066272 AA, US2008060168 AA, US2008060167 AA, US2008039767 AA, US2008039765 AA, US2008039764 AA, US2008039757 AA, US2008034459 AA, US2007293798 AA, US2007282230 AA, US2007191749 AA, US2007185425 AA, US2007169378 AA, US2007167884 AA, US2007039085 AA, US2006229541 AA, US2006217649 AA, US2006202078 AA, US2006202077 AA, US2006189907 AA, US2006185357 AA, US2006174516 AA, US2006156517 AA, US2006135902 AA, US2006135899 AA, US2006084899 AA, US2006070165 AA, US2006070164 AA, US2006030806 AA, US2006030805 AA, US2006030804 AA, US2006030803 AA, US2006030802 AA, US2006026736 AA, US2006026733 AA, US2006026732 AA, US2006020237 AA, US2006015988 AA, US2006015980 AA, US2005284003 AA, US2005274046 AA, US2005273025 AA, US2005247813 AA, US2005172517 AA, US2005171461 AA, US2005165338 AA, US2005160627 AA, US2005145256 AA, US2005131324 AA, US2005081339 AA, US2004167453 AA, US2004019307 AA, US2004010212 AA, US2003204938 AA, US2003171703 AA, US2003093882 AA, US2002128574 AA, US2002095750 AA, US2002095105 AA, US1012017 A, JP3031760 U, JP2005211626 A2, JP2004041666, JP2004016732, GB2178940 A1, GB2124473 A1, FR2681516 A1, FR2634988 A1, FR2399811 A1, FR2177294, EP2468323 A1, EP1236412 A1, EP0770368 A1, EP0693260 B1, EP0651954 B1, EP0614625 A1, EP0614624 A1, EP0589233 B1, EP0589232 B1, EP0393380 B1, EP0201051, EP0095396, DE9315776 U, DE3822113 A1, DE3228753 A1, DE29503552 U1, DE2341658 A1, DE19945045 A1, DE10057286 A1, CH624001, CH612076, CH577282, CA2114387 AA, CA2112789 AA,

Forward Citations: WO17040013, WO17019485, WO16170433, WO16041965, WO16041964, WO16025371, WO15179332, WO15134085, WO15048265, WO14144441, WO13156351, WO13106620, WO13066951, WO12109524, WO12054700, WO12024479, WO12019069, WO12003000, WO11071522, WO11066323, USD784548, USD776289, USD776288, USD772418, USD753837, USD744111, USD742017, USD731070, USD729393, USD712048, USD706942, USD703335, USD673280, USD672878, USD643537, USD634438, USD616556, US9597786, US9597219, US9572705, US9554935, US9554933, US9554922, US9539135, US9539117, US9510965, US9492305, US9492301, US9468554, US9468553, US9439800, US9414953, US9395007, US9393144, US9370440, US9357807, US9351864, US9351856, US9345607, US9345592, US9339397, US9339089, US9333106, US9333097, US9320307, US9314363, US9248042, US9248033, US9221177, US9220625, US9220624, US9220621, US9211201, US9180038, US9179729, US9149370, US9149089, US9125730, US9072341, US9060883, US9050202, US9044307, US9032635, US9011357, US8984719, US8945034, US8939925, US8932245, US8926537, US8900325, US8870967, US8864846, US8858482, US8808214, US8795385, US8740829, US8734528, US8622946, US8574181, US8551184, US8551029, US8512415, US8506510, US8500823, US8468657, US8453663, US8449485, US8424168, US8419804, US8376971, US8303528, US8287477, US8277401, US8002724, US2016038330, US2015297973, US2015257905, US2015237952, US2015150383, US2015121669, US2014276310, US2014097283, US2014053313, US2014046233, US2013310721, US2012255204, US2011232709, US2011146032, US2010312363, ITVR20120075, EP3027148, EP3027148, EP2755612, CN105899169, CN105478592, CN105361990, CN104394809, CN104394809, CN103948462, CN103442669, CN103179924,

Abstract:
Source: US2009287127A An orthopedic device in the form of a circumferential walker includes a first member (posterior shell) and a second member (dorsal shell) corresponding to the first member. An outsole or plantar shell portion is attached to, or formed on or with the posterior shell. An expansion joint is positioned in the posterior shell or dorsal shell to expand to accommodate larger sized lower legs. The dorsal and posterior shells may include flexible or resilient edge portions to reduce pressure points and to further accommodate users having larger sized lower legs. The dorsal shell also includes a flexible or resilient connecting portion to accommodate users having larger ankles and feet and to reduce or eliminate the formation of a pressure point along the dorsal shell. Quick–connecting buckle assemblies can be provided to allow a user to quickly don and doff the orthopedic device.

155) Family number: 52349715 (WO12156068A1) © PatBase

Title: RE–CLOSABLE CONTAINER/BEVERAGE CAN

Priority: DE201110101609 20110514

Family:

Publication number	Publication date	Application number	Application date
DE102011101609 A1	20121115	DE201110101609	20110514
WO12156068 A1	20121122	WO2012EP02059	20120514

Probable Assignee: ACKERMANN

Assignee(s):(std)**:** ACKERMANN BRUNO ; FOLLAND DIETER ; GOETZ HERMANN ; ZIELKE AXEL

Assignee(s): ZIELKE ; ACKERMANN ; GOETZ ; FOLLAND

Inventor(s):(std)**:** ACKERMANN BRUNO ; FOLLAND DIETER ; GOETZ HERMANN ; ZIELKE AXEL

Agent(s): BURKART BILL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D43/18 B65D51/00 B65D51/20 (Advanced/Invention)

CPC: B65D17/165 B65D2251/0025 B65D2251/0071 B65D2517/0014 B65D2517/0041

European class: B65D17/16B2 L65D251/00Y2J L65D251/00Y6A L65D517/00Y2C L65D517/00Y5D1

Classification Explorer

Cited documents: US6739471 BB, EP1265792 B1,

DE102005060835 A1

Forward Citations: GB2514635, DE102012213094,

Abstract:
The invention relates to a re–closable container having a container lid (2) that can be broken open and a lid rotary closure (3), which is designed to tear the discharge opening (40) open and to re–close the discharge opening (40). The container lid (2) and the lid rotary closure are supported via a coupling device (5, 6) during the breaking–open operation.

0) US4416389A – RETAINED TAB EASY OPEN END (SMALL POUR HOLE)

156) Family number: 3874560 (US4416389A) © PatBase

Title: Retained tab easy open end (small pour hole)

Priority: US19820436858 19821026

Family:

Publication number	Publication date	Application number	Application date
US4416389 A	19831122	US19820436858	19821026

Probable Assignee: REXAM BEVERAGE CAN CO

Assignee(s):(std)**:** AMERICAN CAN CO

Assignee(s): AMERICAN CAN CO A CORP OF NJ ; AMERICAN CAN COMPANY ; AMERICAN CAN PACKAGING INC ; AMERICAN NATIONAL CAN CO ; NIPPON TELEGRAPH AND TELEPHONE PUBLIC CORP ; SHOWA ELECTRIC WIRE AND CABLE CO LTD ; REXAM BEVERAGE CAN CO

Inventor(s):(std)**:** WILKINSON HARLEN E ; WREN FRED W

International class (IPC 8–9): B65D41/32 (Advanced/Invention); B65D41/32 (Core/Invention)

International class (IPC 1–7): B65D41/32

CPC: B65D17/165

European class: B65D17/16B2

US class: 220/269 220/270 220/623 220/72

Classification Explorer

Cited documents: US4387827 A, US4361251 A, US4219127 A, US4210257 A, US3957172 A,

Forward Citations: WO8607033, WO13188556, USD762114, USD750488, USD749415, USD727725, USD715647, USD715144, USD691039, US9555459, US9545655, US9446879, US9334078, US9233784, US9174262, US8646643, US8567158, US7926675, US7922025, US7909196, US7748563, US7721906, US7384227, US7165926, US6951293, US5749488, US5152421, US5129541, US5007554, US4576305, US4503989, US2013098927, US2008067174, US2008067171, US2007062950, US2006277966, US2006016815, US2006010956, US2005252917, US2004211786, US2004140309, AU574311,

Abstract:
Source: US4416389A Shown is an easy open closure for a container wherein there is a ring–pull tab held by an integral rivet to the central circular recessed panel of the closure. The tab however, rests on a raised portion of that panel which portion includes various areas of weakening and strengthening and a displaceable panel therein defined by a score line. The raised portion positions the tab to protect it against abuse loadings due to handling and shipping full containers having the closure. About the periphery of the central circular panel is a stepped wall portion except near the area of the score line for the displaceable panel where the wall is unstepped.

0) US3966082A – ANNULAR COLLAR SAFETY CLOSURE

157) Family number: 1298402 (US3966082A) © PatBase

Title: Annular collar safety closure

Priority: US19750552073 19750224

Family:

Publication number	Publication date	Application number	Application date
US3966082 A	19760629	US19750552073	19750224

Probable Assignee: MEAD JOHNSON AND CO

Assignee(s):(std)**:** MEAD JOHNSON AND CO

Assignee(s): MEAD JOHNSON AND COMPANY

Inventor(s):(std)**:** HOPKINS BRIAN D

International class (IPC 8–9)**:** B65D50/06 (Advanced/Invention); B65D50/00 (Core/Invention)

International class (IPC 1–7)**:** B65D55/02

CPC: B65D50/06

European class: B65D50/06

US class: 215/225 215/274 220/306 220/319 220/793

Classification Explorer

Cited documents: US3811589 A, US3773204 A, US3757979 A, US3693820 A, US3669295 A,

Forward Citations: WO9730904, WO9014286, WO08083141, WO08083141, USD782696, USD733320, US9505522, US9387963, US8857645, US8627981, US8511499, US8453873, US8308008, US7038137, US6278840, US5918763, US5857579, US5772057, US5755345, US5662230, US4941580, US4730745, US4516683, US4412630, US4385706, US4315578, US4214486, US2011186570, US2010108670, US2008156858, US2008093327, US2007143968, US2005082300, US2004256138,

Abstract:
Source: US3966082A A rotatable annular collar adapted for use with a conventional overcap of the snap–fit type and a container having a cylindrical mouth, an inwardly directed annular groove extending completely around the wall of the container and an outwardly projecting annular bead positioned at or between the mouth of the container and the annular groove formed for releasable holding engagement with the snap–fit cap is provided. The snap–fit cap has a top panel, an annular skirt depending therefrom and a lift tab extending outwardly from the lower margin of the depending skirt which also has an inwardly projecting annular bead adapted to snap over the outwardly projecting annular bead of the container. The rotatable annular collar has an upstanding exterior wall member with an access gate therein, an inwardly extending flange connecting the exterior wall member and an interior annular rib member frictionally fitted to the annular groove of the container. Extending outwardly from the inner wall of the flange is a raised flat area which circumferentially extends at least the width of the gate whereby access to the bottom rim of the depending skirt is prevented and the flange is reinforced. In order to remove the snap–fit cover from the container, the annular collar is rotated by grasping the annular upstanding wall member and turning until the access gate is aligned with the lift tab. By insertion of a finger or thumb nail between the raised flat area and the bottom of the lift tab the snap–fit cover is forced upward and removed.

0) US3259265A – RESEAL FOR TAB OPENING CANS

158) Family number: 21468147 (US3259265A) © PatBase

Title: RESEAL FOR TAB OPENING CANS

Priority: US19640347745 19640227

Family:

Publication number	Publication date	Application number	Application date
BE658191 A	19650430		19650112
FR1420867 A	19651210	FR19650001822	19650113
GB1031324 A	19660602	GB19650004467	19650202
NL6501848 A	19650830	NL19650001848	19650215
US3259265 A	19660705	US19640347745	19640227

Probable Assignee: CROWN CORK AND SEAL CO

Assignee(s):(std): CROWN CORK AND SEAL CO

Assignee(s): CROWN CORK AND SEAL CO INC ; CROWN CORK AND SEAL COMPANY INC

Inventor(s):(std): STUART EDWARD P

International class (IPC 8–9): B65D17/50 B65D51/00 (Advanced/Invention); B65D17/00 B65D51/00 (Core/Invention)

International class (IPC 1–7): B65D17/06

CPC: Y02W30/807 B65D51/007 B65D17/165 B65D17/506 B65D2517/0043

European class: B65D17/16B2 B65D17/50B B65D51/00F L65D517/00Y5D2

US class: 220/269 220/800 220/805 D9/438

Classification Explorer

Cited documents: US3187964 A, US3158279 A, FR1238880 A,

Forward Citations: USD696593, USD424438, US7735673, US7500577, US7152753, US7000797, US6330954, US5975327, US5964366, US5810189, US5715964, US4524879, US4473168, US4463866, US3952911, US3438542, US2007131690, US2007023441, US2006175332, US2006163254, US2005236411, US2003080132, GB2121773,

Abstract:
Source: GB1031324A 1,031,324. Opening containers; container closures. CROWN CORK and SEAL CO. Inc. Feb. 2, 1965 [Feb. 27, 1964], No. 4467/65. Headings B8D and B8T. A seal for a keyhole–shaped opening formed in the wall of a container has a stud 28 with a stem 30, Fig. 4 (not shown), which may be inserted through the larger part of the opening and drawn towards the smaller end after which the outer end 34 of the seal may be pressed home into the larger part of the opening. The seal, which has a sealing rib 32, may be of plastics material; it may be attached by spot adhesive to the outside of a container having a tear tab for forming the keyhole–shaped opening, Fig. 1 (not shown). Either the parts 32a or the U–shaped part 32b of the rib 32 may be omitted. The parts 32a may be joined by a strengthening rib.

159) Family number: 31390995 (US2002054166A) © PatBase

Title: USER INTERFACE FOR EXPLORING A GRAPH OF INFORMATION

Priority: US20000204915P 20000516 US20000207130P 20000524 US20010859343F 20010516 US20010866346 20010524 US20010859343 20010516 US20000209505P 20000605 US20020169975F 20021028 US20030190783F 20030926 US20030190783 20030926 US20020169975 20021028 US20040212793F 20040907 US20010866346F 20010524 US20010875409F 20010605 US20010875409 20010605 US20040212796F 20040907 US20040212794F 20040907 US20040212795F 20040907 US20040985644 20041110

Family:

Publication number	Publication date	Application number	Application date
US2002054166 AA	20020509	US20010875409	20010605
US2002145623 AA	20021010	US20010859343	20010516
US2005114786 AA	20050526	US20040985644	20041110
US485279 A	18921101		00000000
US6879332 BB	20050412	US20010859343	20010516
US6888554 BA	20050503	US20010866346	20010524
US7036093 BB	20060425	US20010875409	20010605
US7290223 BB	20071030	US20040985644	20041110
USD485279 S1	20040113	US20020169975F	20021028
USD497617 S1	20041026	US20030190783F	20030926
USD513511 S1	20060110	US20040212796F	20040907
USD528556 S1	20060919	US20040212793F	20040907
USD545323 S1	20070626	US20040212794F	20040907
USD545324 S1	20070626	US20040212795F	20040907
WO02093349 A1	20021121	WO2002US15462	20020516

Probable Assignee: GROXIS INC

Assignee(s):(std)**:** GROXIS INC

Assignee(s): KOMARANNI PROPERTIES LLC ; CALLAHAN CELLULAR LLC ; DECOMBE JEAN MICHEL ; GROXIS

Inventor(s):(std)**:** DECOMBE JEAN MICHEL ; PITTMAN RAYMOND J ; HAWKEN PAUL

Agent(s): STRATEGIC PATENT SERVICES INC; GARY; ZALEWSKI GARY; BLAKELY SOKOLOFF TAYLOR AND ZAFMAN

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

International class (IPC 8–9): G06F13/00 G06F15/00 G06F17/30 G06F3/00 G06F3/033 G06F3/048 G09G5/00 (Advanced/Invention); G06F17/30 G06F3/033 G06F3/048 G09G5/00 (Core/Invention)

International class (IPC 1–7): G06F13/00 G06F3/00 G09G5/00

CPC: G06F3/0481 G06F3/0482 G06F17/30958 H04M11/06

European class: G06F17/30Z1G G06F3/033A1 G06F3/033A1M G06F3/0481 G06F3/0482

US class: 345/645 345/734 345/764 345/848 345/853 345/854 370/214 707/E17.011 715/734 715/734P 715/764 715/764P 715/781 715/781S 715/800 715/808 715/808S 715/810 715/810S 715/821 715/841 715/841S 715/848 715/848S 715/853 715/853P 715/853S 715/854 D14/485 D14/486

Locarno class: 14/04

Classification Explorer

Cited documents: WO0115011 A2, WO0013104 A1, WO0001104 A1, USD502184 S1, USD500765 S1, USD496370 S1, USD495715 S1, USD495339 S1, USD479720 S1, USD478912 S1, USD475279 S1, USD474778 S1, USD474197 S1, USD474195 S1, USD469105 S1, USD468748 S1, USD464360 S1, USD463444 S1, USD443623 S1, USD439584 S1, US7042846 BB, US6990238 BA, US6775659 BB, US6628304 BB, US6628304 BA, US6628304 B1, US6604108 BA, US6549221 BA, US6496842 BA, US6460025 BA, US6434556 BA, US6404446 BA, US6393159 BA, US6377287 BA, US6373484 BA, US6363377 BA, US6348927 BA, US6285367 BA, US6278464 BA, US6256032 BA, US6237006 BA, US6166739 A, US6166736 A, US6111578 A, US6104400 A, US6037944 A, US6031537 A, US5924090 A, US5845270 A, US5844559 A, US5615325 A, US5606654 A, US5528735 A, US5495479 A, US5495473 A, US5341466 A, US5295243 A, US2001034733 AA,

Forward Citations: WO13113028, WO09051332, USD789385, USD789381, USD789379, USD788788, USD788161, USD788158, USD788152, USD787533, USD786290, USD785036, USD785025, USD785024, USD785015, USD784389, USD784385, USD784382, USD784362, USD783662, USD783640, USD783096, USD781879, USD781878, USD781327, USD780805, USD779533, USD778946, USD778294, USD776129, USD775647, USD775172, USD773525, USD773499, USD772932, USD772926, USD772297, USD772286, USD772281, USD772270, USD772255, USD772254, USD771667, USD771193, USD771061, USD770505, USD769917, USD769893, USD769885, USD769884, USD769279, USD768677, USD768675, USD766298, USD766289, USD766282, USD766270, USD766269, USD765091, USD764500, USD763866, USD763865, USD763293, USD763278, USD763265, USD762717, USD762671, USD762240, USD760846, USD760773, USD760760, USD760740, USD759723, USD759671, USD759072, USD758430, USD758403, USD757763, USD757061, USD754734, USD754671, USD754164, USD753685, USD753177, USD749606, USD749113, USD748113, USD747730, USD747333, USD747330, USD746312, USD746305, USD746304, USD746300, USD745881, USD745050, USD745015, USD742397, USD738898, USD737839, USD737308, USD737307, USD737288, USD736814, USD736254, USD736243, USD736219, USD735746, USD735745, USD735696, USD733167, USD732575, USD732555, USD732549, USD732058, USD732049, USD729819, USD728592, USD728591, USD728590, USD727931, USD727929, USD727338, USD727337, USD725148, USD725143, USD725126, USD725125, USD722613, USD722606, USD721084, USD720368, USD720362, USD718325, USD717816, USD717815, USD717814, USD717813, USD716832, USD716831, USD716819, USD716341, USD716339, USD716335, USD716333, USD716332, USD716331, USD716328, USD716327, USD714865, USD714813, USD714325, USD714324, USD714323, USD714322, USD714321, USD714320, USD714319, USD714318, USD714317, USD714316, USD714315, USD714314, USD714313, USD712911, USD711896, USD711395, USD711394, USD708203, USD706775, USD706295, USD705245, USD704734, USD704211, USD702707, USD702706, USD702252, USD702251, USD702250, USD701880, USD701877, USD701869, USD701519, USD701515, USD701240, USD700207, USD699750, USD699749, USD699748, USD699747, USD699746, USD699745, USD699744, USD699743, USD699737, USD699251, USD699248, USD698818, USD697930, USD697077, USD695774, USD695302, USD694776, USD694775, USD694261, USD693846, USD693845, USD693367, USD693366, USD693355, USD693354, USD692912, USD692911, USD692904, USD692454, USD692453, USD692452, USD692451, USD692445, USD692019, USD691666, USD691168, USD691167, USD691159, USD690721, USD689891, USD688691, USD688690, USD688678, USD688263, USD688262, USD688261, USD688260, USD688259, USD687061, USD687060, USD687055, USD687054, USD687053, USD687052, USD686635, USD686236, USD686233, USD686232, USD686230, USD686229, USD686228, USD686227, USD686226, USD686225, USD686224, USD685815, USD685814, USD685813, USD685812, USD685375, USD683346, USD682312, USD682310, USD682305, USD682304, USD681050, USD681047, USD678313, USD677685, USD677268, USD674994, USD673973, USD670309, USD670308, USD669496, USD669091, USD668262, USD667834, USD666209, USD665422, USD665421, USD665420, USD665403, USD664988, USD664561, USD664554, USD664553, USD664552, USD663744, USD663743, USD663740, USD662942, USD661703, USD661313, USD661312, USD659159, USD658678, USD658677, USD658676, USD658670, USD658669, USD658195, USD657379, USD657378, USD657377, USD656947, USD656514, USD656513, USD656512, USD656510, USD656509, USD656152, USD655719, USD655716, USD655715, USD655714, USD655713, USD655304, USD654930, USD654929, USD654928, USD654924, USD654086, USD654085, USD653260, USD653259, USD650790, USD649155, USD649154, USD647914, USD646694, USD646693, USD646692, USD646691, USD646690, USD646296, USD646295, USD646294, USD646293, USD646292, USD646291, USD646290, USD646289, USD646288, USD646287, USD646286, USD646285, USD646284, USD644243, USD644242, USD643044, USD642184, USD641373, USD636403, USD636402, USD636401, USD636400, USD636399, USD633918, USD631891, USD631890, USD631889, USD631888, USD631887,

USD631886, USD631060, USD628584, USD628206, USD627360, USD626132, USD625734, USD624935, USD624918, USD622731, USD622730, USD620948, USD619593, USD619145, USD617805, USD617339, USD616452, USD613301, USD607895, USD607008, USD606080, USD605654, USD604325, USD603421, USD601157, USD601156, USD600248, USD599814, USD599810, USD598927, USD598926, USD598924, USD598464, USD598463, USD598460, USD596645, USD596190, USD593107, USD591765, USD591762, USD591305, USD590408, USD589051, USD584737, USD584736, USD581940, USD579947, USD579020, USD576634, USD574395, USD574393, USD573605, USD573603, USD573602, USD573601, USD571821, USD571820, USD571819, USD569387, USD568899, USD568898, USD568897, USD566718, USD564539, USD563972, USD558211, USD557700, USD555164, USD554652, USD544877, USD534915, USD534541, USD532015, USD529037, USD529036, USD527011, USD523441, USD511524, USD511167, USD507002, USD505135, USD493177, US9679049, US9619909, US9619551, US9614807, US9612032, US9575496, US9558259, US9552002, US9542483, US9495779, US9495144, US9495060, US9489446, US9489062, US9477751, US9477732, US9476606, US9471193, US9459018, US9454291, US9453655, US9430756, US9424001, US9411505, US9400700, US9396241, US9384573, US9372701, US9369542, US9355382, US9354811, US9348507, US9342909, US9342904, US9336496, US9336303, US9330503, US9304989, US9304835, US9304659, US9298196, US9291359, US9280256, US9275344, US9245367, US9223323, US9222693, US9210247, US9208592, US9208221, US9195966, US9195399, US9189123, US9176642, US9175871, US9165062, US9160828, US9135659, US9127853, US9104648, US9104211, US9098171, US9092039, US9087296, US9082232, US9081481, US9075492, US9064008, US9038001, US9026232, US9015633, US9009126, US9003326, US8998102, US8996507, US8990097, US8984447, US8954893, US8954891, US8954356, US8949235, US8942488, US8938450, US8918219, US8910084, US8909647, US8909569, US8903867, US8893041, US8893025, US8866818, US8866815, US8850348, US8832092, US8826160, US8819569, US8818038, US8792733, US8788574, US8775956, US8762302, US8727611, US8725736, US8725659, US8713018, US8706270, US8701048, US8700627, US8692826, US8677269, US8676626, US8659605, US8650190, US8645378, US8640056, US8639044, US8635223, US8631070, US8626761, US8620635, US8612446, US8610719, US8595649, US8589374, US8577350, US8572084, US8555166, US8548448, US8538836, US8531451, US8520001, US8515958, US8515957, US8514248, US8504487, US8495499, US8493406, US8489591, US8456473, US8428561, US8411085, US8402395, US8402026, US8380718, US8370770, US8370769, US8369627, US8359548, US8358308, US8352397, US8332782, US8327268, US8312019, US8291331, US8255281, US8230364, US8228332, US8205799, US8205157, US8183979, US8155453, US8140621, US8056019, US8028250, US8005822, US7996282, US7984389, US7973788, US7966321, US7966309, US7934161, US7928982, US7908559, US7870507, US7830383, US7810048, US7797635, US7788280, US7710420, US7620638, US7595802, US7555476, US7493315, US7447677, US7404151, US7266781, US7242413, US7171628, US7165226, US7086012, US7084858, US7046248, US6775659, US2015347968, US2015169699, US2015046883, US2013290878, US2013275900, US2013054652, US2013007652, US2012233562, US2012167015, US2012137220, US2012110495, US2012054687, US2011271230, US2011225528, US2011202888, US2011179390, US2011145760, US2011138340, US2011138338, US2011113385, US2011113331, US2011042824, US2011029529, US2011016432, US2010325578, US2010321391, US2010287504, US2010257454, US2010250672, US2010241544, US2010231533, US2010175022, US2010125581, US2010077345, US2010058193, US2010050123, US2010050087, US2010050086, US2010042941, US2010037144, US2010036968, US2009327935, US2009322756, US2009228825, US2009187864, US2009172603, US2009158199, US2009132555, US2009106705, US2009106685, US2009013287, US2009013281, US2009013271, US2008295038, US2008278485, US2008256454, US2008235627, US2008215978, US2008189614, US2008172374, US2008172362, US2008172357, US2008071629, US2007226640, US2007208840, US2007206512, US2007198581, US2007180408, US2007162862, US2007156664, US2007143667, US2007109297, US2007042800, US2007028190, US2007011617, US2007011146, US2006265669, US2006218478, US2006190842, US2006190833, US2006184897, US2006161535, US2006082547, US2006048076, US2006007229, US2006005164, US2005172216, US2005172215, US2005171948, US2005004910, US2004267718, US2004239683, US2004217983, US2004169688, US2004095393, US2004036698, US2001035885, GB2512574, EP2487601, EP2487600, EP2487599,

Abstract:
Source: US2002054166A A method for displaying a source node having connections to contained nodes and linked nodes peripherally within and around the source node to which they are connected, computing a focus position for each of the contained and linked nodes; displaying a first contained node at an inclusion start angle, and displaying a first linked node at an adjacency start angle. Focus positions are calculated for a first contained node and a first linked node based on the start angles, a direction of rotation, either clockwise or

counterclockwise, and the number of contained and linked nodes connected to the source node.

0) US2006090611A – PANEL MOUNTING CLIP

160) Family number: 32880456 (US2006090611A) © PatBase

Title: PANEL MOUNTING CLIP

Priority: AU20040224882 20041028 US20050155893 20050620 US20090385948 20090424

Family:

Publication number	Publication date	Application number	Application date
AU2004224882 AA	20060518	AU20040224882	20041028
AU2004224882 BB	20061116	AU20040224882	20041028
US2006090611 AA	20060504	US20050155893	20050620
US2009271970 AA	20091105	US20090385948	20090424

Probable Assignee: FASTMOUNT LTD

Assignee(s):(std)**:** FASTMOUNT LTD ; HANLEY RONALD C ; KELLY GREGORY J

Assignee(s): FASTMOUNT LIMITED

Inventor(s):(std)**:** HANLEY RONALD C ; HANLEY RONALD CHARLES ; KELLY GREGORY J ; KELLY GREGORY JOHN

Inventor(s): RONALD CHARLES HANLEY ; GREGORY JOHN KELLY

Agent(s): A J PARK; AJ PARK; ORIGIN PATENT AND TRADE MARK ATTORNEYS; JACOBSON HOLMAN PLLC

International class (IPC 8–9): B23P11/00 B25B13/06 B63B17/00 F16B13/04 F16B39/00 F16B5/12 (Advanced/Invention); B23P11/00 B25B13/00 B63B17/00 F16B13/04 F16B39/00 F16B5/12 (Core/Invention)

CPC: Y10T29/49948 F16B5/0657 B23B49/005 B23B51/009 B23B2260/0482 B23B2260/12 B25B13/06 B25B13/065 B25B13/48 F16B5/0664 F16B35/06 F16B37/125

European class: B23B49/00C1 B23B51/00L B25B13/06 B25B13/06B B25B13/48 F16B37/12B2 F16B5/06B3H F16B5/06B3J L23B260/048C L23B260/120 R16B35/06

US class: 29/525.02 29/525.020P 295/250.2 411/81 411/81S 81/121.1 81/121.100 81/121.100P

Classification Explorer

Cited documents: WO0202954 A1, US6769849 BB, US6685407 BA, US6612796 BB, US6149183 A, US5871486 A, US5850676 A, US5846040 A, US5716161 A, US5641255 A, US5580204 A, US5211519 A, US4927287 A, US4878792 A, US4837942 A, US4776737 A, US4726705 A, US4716633 A, US4616953 A, US4420859 A, US4408372 A, US4186645 A, US4176428 A, US4059041 A, US3832931 A, US3294140 A, FR2549172 A1, DE3042140 A1, DE20308559 U1, AU4327685 A1,

Forward Citations: WO16171611, US9228602, US8720016, US2014314517, US2011191990, US2008257118, EP2796730,

Abstract:
Source: US2006090611A A fastener has provided particularly useful for mounting a panel to an underlying supporting structure. The fastener includes a socket component and a plug component. The socket component has a cup open at one end and an external spiral thread. The axis of the spiral thread is parallel with the open direction of the cup. The socket may be embedded in a predrilled aperture in a supporting structure by a rotary driving action. The wall of the cup provides a constriction or throat spaced from the bottom of the cup. The plug component has a base with an external spiral thread and a protrusion from the base. The base of the plug can be screwed into a predrilled aperture in a panel. A protrusion from the base extends substantially co−axial with the axis of the thread. The protrusion includes a head portion spaced away from the base. The protrusion is sized to enter the cup of the socket component and the head portion is sized to interfere with the throat but to be forcible past the throat. With the head of the plug component forced past the throat of the cup the plug component is engaged in the socket. The fastener provides a panel mounting solution that is easy to install and where the components can be replaced as required.

0) GB1311689A – CAN OPENER

161) Family number: 387928 (GB1311689A) © PatBase

Title: CAN OPENER

Priority: AU19700014535 19700430 US19690821240 19690502

Family:

Publication number	Publication date	Application number	Application date
AU197014535 A1	19711104	AU19700014535	19700430
AU207014535 A1	19711104	AU19700014535	19700430
DE2021391 A1	19701112	DE19702021391	19700430
FR2047157 A5	19710312	FR19700015913	19700430
GB1311689 A	19730328	GB19700020673	19700429
ZA7002794 A	19711229	ZA19700002794	19700427

Probable Assignee: HOOVER LTD

Assignee(s):(std)**:** HOOVER LTD

Assignee(s): HOOVER LIMITED

Inventor(s):(std)**:** HUCK A ; HUCK ALFRED J ; HUNTER KEVIL L ; J HUCK ALFRED ; KEVIL L ; KEVIL L HUNTER

Inventor(s): L HUNTER KEUN AND ALFRED J HUCK ; L HUNTER KEVIL ; ALFRED J HUCK

International class (IPC 8–9)**:** B67B7/00 B67B7/70 (Advanced/Invention); B67B7/00 (Advanced/Non–invention); B67B7/00 (Core/Invention)

International class (IPC 1–7)**:** B67B7/00 B67B7/38 B67D

CPC: B67B7/38

European class: B67B7/38

Classification Explorer

Abstract:
Source: GB1311689A 1311689 Can openers HOOVER Ltd 29 April 1970 [2 May 1969] 20673/70 Heading B8D In a can opener having a shaft 36 of a can drive–wheel 16 driven by an electric motor through a gear train in a casing 10, the drive wheel, shaft, and a lever handle 42 carrying a cutter wheel 14 are mounted on a support plate 14, which is readily detachably fastened to the casing by manually–operable fasteners 58 and 60 captive on the plate whereby the cutter wheel and drive wheel may be removed for cleaning or replacement. The fasteners each comprise a knob 62 having a body portion 64, which is retained in a bore of the support plate by a retaining washer 68, and a cam key portion 65, which passes through a slot–shaped bore in a casing boss 70 and locks the plate to casing when the fastener is rotated through 90 degrees. The drive–wheel shaft 36 is rotatably–mounted in the support plate and has a flattened end portion 39, which engages in a corresponding slot 28 of the final gear 22 of the gear train on fastening the support plate to the casing. A magnet 54 for holding the cut–away can end is detachably–attached to the support plate by an arm 52.

162) Family number: 48789328 (WO11050110A1) © PatBase

Title: METHODS AND SYSTEMS TO COLLECT AND PREPARE SAMPLES, TO IMPLEMENT, INITIATE AND PERFORM ASSAYS, AND TO CONTROL AND MANAGE FLUID FLOW

Priority: US20090253356P 20091020 US20090253365P 20091020 US20090253373P 20091020 US20090253377P 20091020 US20090253383P 20091020 US20090266019P 20091202

Family:

Publication number	Publication date	Application number	Application date
WO11050110 A1	20110428	WO2010US53444	20101020

Probable Assignee: BOSTON MICROFLUIDICS

Assignee(s):(std)**:** BOSTON MICROFLUIDICS ; BUTZ DAVID ; CHRISTIAN KATE E ; JOHNSON BRANDON T ; ZAPPIA THOMAS M ; VOLGER DAVID A

Inventor(s):(std)**:** BUTZ DAVID ; CHRISTIAN KATE E ; JOHNSON BRANDON T ; VOLGER DAVID A ; ZAPPIA THOMAS M

Agent(s): GARRETT PATRICK E

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B01J19/00 (Advanced/Invention)

CPC: B01L3/50273 A61B10/0038 A61B10/0045 A61B10/0051 A61B10/007 B01L3/502 B01L3/5025 B01L3/502723 B01L3/5029 B01L2200/0684 B01L2200/0689 B01L2200/10 B01L2300/043 B01L2300/045 B01L2300/0636 B01L2300/0672 B01L2300/0681 B01L2300/0816 B01L2300/0832 B01L2300/0867 B01L2400/0478 G01N33/54366

European class: A61B10/00L B01L3/502 B01L3/5027C B01L3/5027D G01N33/543K K61B10/00F K61B10/00L2 K61B10/00L8 L01L200/06M L01L200/06N L01L200/10 L01L3/5025 L01L3/5029 L01L300/04A4 L01L300/04A8 L01L300/06B2 L01L300/06C L01L300/06D L01L300/08B4 L01L300/08C L01L300/08E4 L01L400/04M2

Classification Explorer

Cited documents: US7517495 BB, US6737278 BA, US5024238 A, US2009215194 AA, US2009215159 AA, US2009176316 AA, US2009123336 AA,

Forward Citations: WO13102201, WO12150544, US9434977, US9199236, US8846310,

Abstract:
Methods and systems to related to sample collection, assays, and fluid control and management. Methods and systems disclosed herein, and portions thereof, may be implemented alone and/or in various combinations with one another.

0) US2011167701A – ROTATABLE MOUNT FOR INTEGRATED RAIL SYSTEM AND ...

163) Family number: 49228688 (US2011167701A) © PatBase

Title: ROTATABLE MOUNT FOR INTEGRATED RAIL SYSTEM AND METHOD FOR USING SAME

Priority: US20100685812 20100112

Family:

Publication number	Publication date	Application number	Application date
US2011167701 AA	20110714	US20100685812	20100112
US8397419 BB	20130319	US20100685812	20100112

Probable Assignee: OTIS PATENT TRUST

Assignee(s):(std)**:** OTIS PATENT TRUST ; WILLIAMS NICHOLAS

Assignee(s): THE OTIS PATENT TRUST

Inventor(s):(std)**:** WILLIAMS NICHOLAS

Agent(s): HARRIS BEACH PLLC

International class(IPC 8–9)**:** B23P11/00 F41C27/00 (Advanced/Invention)

CPC: F41G11/003 F41C23/16 Y10T29/49826 Y10T29/49947

European class: F41C23/16 F41G11/00B4

US class: 29/428 29/428S 29/525.01 29/525.010S 42/90 42/90P

Classification Explorer

Cited documents: USD283433 S1, US8056277 BB, US7698847 BB, US7578089 BA, US7562484 BB, US7454858 BB, US5471777 A, US5417002 A, US4756111 A, US4429468 A, US4299044 A, US4079970 A, US4026055 A, US3877166 A, US3260001 A, US2826848 A, US2775806 A, US2447892 A, US2202000 A, US2187054 A, US2011167699 AA, US2011023348 AA, US2009313874 AA, US2009277069 AA, US2009223105 AA, US2007271832 AA, US2007266612 AA, US2006191183 AA, US2006179701 AA, US2006026888 AA,

Forward Citations: USD773590, US9010009, US8850735, US2012102805,

Abstract:
Source: US2011167701A Embodiments of the application can include an accessory support for a firearm (e.g., integrated rail system such as a picatinny rail) and methods for using the same. Embodiments of an accessory support can include an inner surface including a curved portion. Embodiments of an accessory support can operate in a first configuration having a slidable or rotatably interaction to the firearm and a second configuration having a locked or immovable interaction to the firearm.

164) Family number: 573164 (US3809283A) © PatBase

Title: PROTECTIVE SCORE SHIELD FOR EASY OPENING CONTAINER

Priority: US19690826966 19690522 US19690884114 19691204 US19710151381 19710609 US19720273371 19720720

Family:

Publication number	Publication date	Application number	Application date
AU197240439 A1	19731004	AU19720040439	19720327
AU466867 B2	19751113	AU19720040439	19720327
BR7019193 A0	19730130	BR19700219193	19700521
BR7203524 A0	19730607	BR19720003524	19720531
CA946302 A1	19740430	CA19690062859	19690923
CA946303 A1	19740430	CA19700080770	19700421
CA946304 A1	19740430	CA19710128158	19711119
DE2008181 A1	19701126	DE19702008181	19700221
DE2008181 C2	19821118	DE19702008181	19700221
DE2039095 A1	19710609	DE19702039095	19700806
DE2039095 C2	19850321	DE19702039095	19700806
DE2200802 A1	19721221	DE19722200802	19720108
DK127747 B	19731231	DK19700002610	19700521
FR2043618 A1	19710219	FR19700018717	19700522
FR2043618 B1	19740920	FR19700018717	19700522
GB1280276 A	19720705	GB19700057819	19701204
GB1322140 A	19730704	GB19720026566	19720607
IT956958 A	19731010	IT19720025465	19720609
JP51018872 B4	19760612	JP19700043965	19700522
JP53045751 B4	19781208	JP19720057606	19720609
SE359504 B	19730903	SE19700006974	19700521
SE371160 B	19741111	SE19700014521	19701028
SE371160 C	19750220	SE19700014521	19701028
US3809283 A	19740507	US19720273371	19720720
ZA7002044 A	19711027	ZA19700002044	19700325
ZA7107966 A	19730725	ZA19710007966	19711126

Probable Assignee: CONTINENTAL CAN CO

Assignee(s):(std)**:** CONTINENTAL AND CO INC ; CONTINENTAL CAN CO ; CONTINENTAL GROUP

Assignee(s): THE CONTINENTAL GROUP INC 10017 NEW YORK N Y US ; THE CONTINENTAL GROUP INC NEW YORK N Y US ; KEHE ALFRED W ; CONTINENTAL CAN CO INC ; CONTINENTAL CAN CO INC US ; CONTINENTAL CAN COMPANY INC ; CONTINENTAL CAN CY INC ; CONTINENTAL CAN CY INC US

Inventor(s):(std)**:** KEHE A ; KEHE ALFRED W ; KEHE ALFRED WILLIAM ; W KEHE ALFRED ; WKEHE A ; KEHE A W

Inventor(s): KEHE ALFRED WILLIAM BERKELEY ILL ; KEHE ALFRED WILLIAM BERKELEY ILL US ; KEHE ALFRED W BERKELEY ILL US ; KEHE A US ; ALFRED W KEHE ; ALFRED W KEHR ; ALFRED WILLIAM KEHE

International class (IPC 8–9)**:** B65D17/00 B65D17/40 B65D41/32 B65D53/02 (Advanced/Invention); B65D17/00 B65D17/28 B65D41/32 B65D53/00 (Core/Invention); B65D B67B (Subclass/Invention)

International class (IPC 1–7)**:** B65D17/00 B65D17/02 B65D17/16 B65D17/20 B65D17/24 B65D17/40 B65D41/32 B65D53/02

CPC: Y10S220/906 B65D17/163

European class: B65D17/16B1

US class: 220/270 220/378 220/5.4 220/54 220/712 220/906

Classification Explorer

Cited documents: US3744668 A, US3527377 A, US3463348 A, US3447713 A, US3397811 A, US2723778 A, JP51018872 A2, DE2008181 C2, DE1948007 A1,

Forward Citations: WO9212060, WO8707581, US4887732, US4044916, US3894652, US3891116, US3883035, JP54036667, FR2327151, EP2189380, EP0268690, DE2039095, AU597682,

Abstract:
Source: US3809283A This disclosure relates to an easy opening container of the type wherein one end has an easy opening end closure including a removable panel portion defined by a score line. The end closure includes pliable band superimposed over the score line and attached to either one or both of the inner or the outer faces of the end closure. Upon removal of the removable panel portion, the band attached to the inner face provides a protective ledge for the raw metal edge about the opening and the band attached to the outer face provides a protective ledge for the removed panel portion.

0) DE19746539A1 – DRINKS CAN PULL–TAB DOSENVERSCHLUSS

165) Family number: 13600165 (DE19746539A1) © PatBase

Title: Drinks can pull–tab

Priority: DE19971038598 19970904 DE19971043056 19970930 DE19971046539 19971022

Family:

Publication number	Publication date	Application number	Application date
DE19746539 A1	19990311	DE19971046539	19971022

Probable Assignee: SCHREIBER HANS

Assignee(s):(std): SCHREIBER HANS

Assignee(s): SCHREIBER HANS DR DR 69469 WEINHEIM DE

Inventor(s):(std): SCHREIBER HANS DR DR

Inventor(s): SCHREIBER HANS DR DR 69469 WEINHEIM DE

International class (IPC 8–9): B65D17/32 B65D17/50 (Advanced/Invention); B65D17/00 B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/32 B65D17/50

CPC: B65D17/165 B65D2517/0043

European class: B65D17/16B2 L65D517/00Y5D2

Classification Explorer

Forward Citations: WO12031994, WO10115911, WO10094793, WO09103817, US9272823, US9162796, US8720740,

Abstract:
Source: DE19746539A1 A drinks can has a pull–ring opening tab with a weak point which fails when the ring is pulled to open the can for consumption. A plastic closure is attached to the pull–ring tab. Following access to the can contents and partial consumption, the closure is folded over the can outlet and push–fitted. An Independent claim is included, describing the lid of the can.

0) US2007266674A – CLAMP FOR USE WITH METAL BAR JOISTS AND BEAMS

166) Family number: 40838977 (US2007266674A) © PatBase

Title: CLAMP FOR USE WITH METAL BAR JOISTS AND BEAMS

Priority: US20060419428 20060519 WO2007US68732 20070511

Family:

Publication number	Publication date	Application number	Application date
CA2649310 AA	20081015	CA20072649310	20070511
US2007266674 AA	20071122	US20060419428	20060519
US7673427 BB	20100309	US20060419428	20060519
WO07137007 A2	20071129	WO2007US68732	20070511
WO07137007 A3	20080221	WO2007US68732	20070511

Probable Assignee: MOREY DOUGLAS H

Assignee(s):(std)**:** MOREY DOUGLAS H

Inventor(s):(std)**:** MOREY DOUGLAS H

Agent(s): SMART AND BIGGAR; MARSHALL GERSTEIN AND BORUN LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): E04C2/32 E04C2/52 E04C5/18 E04D3/30 E04G25/00 F16B2/06 (Advanced/Invention); E04C2/32 E04C2/52 E04C5/18 E04D3/24 E04G25/00 F16B2/02 (Core/Invention)

CPC: Y10T24/44026 E04D13/031 E04C2003/026

European class: E04D13/03A2 P04C3/02B

US class: 24/458 248/228.1 52/219 52/220.8 52/783.11

Classification Explorer

Cited documents: US6837019 BB, US6729083 BA, US6471171 BA, US6470644 BB, US6341466 BA, US6240682 BA, US6098942 A, US5964042 A, US5857292 A, US5743063 A, US5647175 A, US5577353 A, US5560576 A, US5516068 A, US5511354 A, US5335469 A, US5292096 A, US5259165 A, US4685646 A, US4660799 A, US4620397 A, US4472917 A, US3964218 A, US3642150 A, US3527007 A, US3392499 A, US2994415 A, US2990920 A, US2838832 A, US2717562 A, US2276139 A,

Forward Citations: WO10083423, USD737999, US9587401, US8683749, US8528292, US8307592, US2012240471, US2011005512, US2010218452, US2010192490, US2008092478, GB2495069, GB2495069,

Abstract:
Source: US2007266674A A clamp for use with metal bar joists (or beams) has one or more steel angled bracket members or plates, adapted to fit under the corrugations of a corrugated steel roof. Each plate of the clamp is adapted to sit horizontally across a top of the bar joist perpendicular to the joist, and extend slightly over an edge of the joist. Each plate contains an elongate slot allowing a bolt to be inserted through the slot. A retainer heel clip is secured to an end of each such bolt. This retainer heel clip is tightened to the underside of the top flange of the bar joist using a washer and a threaded plate or nut, thus providing a clamping action. Each clamp has a vertical attachment tongue section of steel welded to it, including one or more elongate slots which complement perforations that occur along the length of a steel framing angle, allowing bolts to attach the clamp and the framing angle together. A pair of the clamps may be used to secure a pair of support angles for supporting a rod for hanging objects at desired locations within a roof support structure.

0) US4747511A – PLUG–TYPE OPENERS FOR PLASTIC CAN ENDS

167) Family number: 5236155 (US4747511A) © PatBase

Title: Plug–type openers for plastic can ends

Priority: US19860884136 19860710

Family:

Publication number	Publication date	Application number	Application date
US4747511 A	19880531	US19860884136	19860710
WO8800560 A1	19880128	WO1987US01811	19870710

Probable Assignee: SUN COAST CLOSURES INC

Assignee(s):(std)**:** SUN COAST PLASTICS INC

Assignee(s): SUN COAST PLASTICS OF FLORIDA INC ; WELLS FARGO BANK NATIONAL ASSOCIATION ; TUBED PRODUCTS LLC ; BANK OF AMERICA TEXAS NA ; CIT GROUP BUSINESS CREDIT INC ; DEUTSCHE BANK TRUST CO ; KERR GROUP INC ; SUN COAST CLOSURES INC ; SPBC INC ; NATIONSBANK OF TEXAS NA ; NATIONSBANK NA ; SUN COAST IND ; SAFFRON ACQUISITION CORP ; PLASTICS FUNDING CORP ; SETCO LLC

Inventor(s):(std)**:** DUTT HERBERT V ; WEIR DIXIE L ; YEAGER DONALD F

Designated states: JP

International class (IPC 8–9)**:** B65D17/50 B65D43/02 B65D43/10 B65D51/16 (Advanced/Invention); B65D17/00 B65D43/02 B65D43/08 B65D51/16 (Core/Invention)

International class (IPC 1–7)**:** B65D17/50 B65D39/00 B65D41/02 B65D51/18 B65D55/16

CPC: B65D17/506 B65D43/0208 B65D51/1683 B65D2543/00092 B65D2543/00296 B65D2543/00407 B65D2543/00509 B65D2543/00537 B65D2543/00555 B65D2543/0062 B65D2543/00657 B65D2543/00685 B65D2543/0074 B65D2543/00796

European class: B65D17/50B B65D43/02S3B B65D51/16E2 L65D543/00Y1F2C L65D543/00Y1M6 L65D543/00Y2K1 L65D543/00Y8D1C L65D543/00Y8D3 L65D543/00Y8D5 L65D543/00Y8S1B10 L65D543/00Y8S1B2 L65D543/00Y8S1D2 L65D543/00Y8S3B4 L65D543/00Y8S3D2

US class: 220/254.1 220/254.2 220/254.7 220/254.9 220/260 220/270 220/271 220/307 220/367.1 220/375

Classification Explorer

Cited documents: US4407424 A, US4393979 A, US4328906 A, US4315578 A, US4280634 A, US4211336 A, US4171062 A, US4157764 A, US4065017 A, US4043474 A, US4002516 A, US3927805 A, US3905502 A, US3904071 A, US3869059 A, US3807595 A, US3797689 A, US3737066 A, US3731835 A, US3462048 A, US3281024 A, US3119509 A, US2770383 A, US2662656 A, US26453 A, US2400851 A, US2207757 A,

Forward Citations: WO9736794, WO9529101, WO9529100, WO9528329, WO15178877, WO15134913, WO12028338, WO04005159, WO03024824, WO0246062, WO0246057, WO0210031, WO02081322, USD787952, USD514445, USD514444, USD485758, US9550611, US9517864, US9440767, US9226455, US9199763, US9181007, US9016034, US8733576, US8727164, US8667735, US8584877, US8454292, US8418871, US8371467, US8360256, US8181809, US8113375, US7950542, US7870967, US7735673, US7731047, US7513381, US7494022, US7328730, US7246715, US7159732, US7156251, US7152753, US7134566, US7131551, US7131550, US7096893, US7063224, US7051896, US6899254, US6874649, US6679397, US6626314, US6220470, US6045004, US6039090, US5996833, US5893480, US5660302, US5498177, US5205430, US5165581, US2016159529, US2015034642, US2014117016, US2012181279, US2012060415, US2012040217, US2011186575, US2011114595, US2011089174, US2011036836, US2010287886, US2010116374, US2009101620, US2009008400, US2008314904, US2008245806, US2008116163, US2007131692, US2007108209, US2007068958, US2007023441, US2006163253, US2006054625, US2006000832, US2005236411, US2005205579, US2005155969, US2005127076, US2005127075, US2005035124, US2004256387, US2004245251, US2004089662, US2004065664, US2004035868, US2003197012, US2003116568, NL1024270, GB2392906, GB2392906, FR2812619, EP2426058, EP2418708, EP0633196, EP0383442, DE10230748, DE102010034059, DE10060999, DE10060998,

AU2002334463,

Abstract:
Source: US4747511A An easy−open lid for an all−plastic beverage can is disclosed, the easy−open feature including a removable closure plug secured in a dispensing aperture formed in the lid of the can. A pull tab is secured to the closure plug for removal of the entire plug.

168) Family number: 64367691 (EP3103685A1) © PatBase

Title: ABSCHLUSSTEIL FUER FAHRZEUGKAROSSERIE, UND MONTAGEVERFAHREN EINES SOLCHEN TEILS INTERIOR FITTING FOR VEHICLE BODY AND METHOD FOR ASSEMBLING SUCH A PART

Priority: FR20150055242 20150609

Family:

Publication number	Publication date	Application number	Application date
EP3103685 A1	20161214	EP20160172967	20160603
FR3037312 A1	20161216	FR20150055242	20150609

Probable Assignee: RENAULT SA

Assignee(s):(std)**:** RENAULT SA

Assignee(s): RENAULT SAS

Inventor(s):(std)**:** TARENBERQUE ERIC

Inventor(s): ERIC TARENBERQUE

Agent(s): RENAULT SAS

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

International class(IPC 8–9)**:** B60R13/04 B62D25/08 B62D25/24 B62D65/02 (Advanced/Invention)

CPC: B60R13/04 B62D25/081

Classification Explorer

Cited documents: US2012200118 AA, US2012175913 AA, JP2012232614 A2, FR2926342 A1,

Forward Citations: JP6117677, JP2015085858,

Abstract:
Source: EP3103685A1 Un procede d'assemblage sur une caisse de vehicule automobile, d'une piece de finition (10) comportant une portion plane d'accostage (5), comprend une etape d'insertion derriere un bord (6) d'une premiere partie de tole de la caisse, parallelement a une premiere direction (X) de la piece, d'une languette (11) de la piece formant crochet, une etape de rotation de la piece autour d'un point d'attache de la languette (11) sur la piece, dans un plan (X Y) parallele a la portion plane d'accostage (5), de maniere a inserer un deuxieme crochet (12) de la piece (10) derriere un bord de tole d'un orifice (22) de la caisse, et une etape de verrouillage de la piece au cours de laquelle on met en appui la portion d'accostage (5) sur une partie parallele de la caisse en inserant dans au moins une decoupe (23, 24) de la partie parallele de caisse, un relief de type harpon (13, 14) faisant saillie par rapport a la portion d'accostage (5). A method of assembling on a motor vehicle Fund, of a piece of finishing (10) with a flat portion of berthing (5), includes a step of inserting behind one edge (6) a first part of sheet metal of the Fund, at the same time has a (X) direction of the room first, tabs (11) of the room forming hook, a rotation of the piece step around a point attachment of the tab (11) on the room, in a (X, Y) plane parallel has the flat berthing (5) portion, in a way a insert a second hook (12) of the piece (10) behind an edge of sheet metal of a hole (22) of the Fund, and a step of locking of the piece during which we put in support the portion of the docking (5) part parallel to the inserant Fund in at least a cut (23 (24) part parallel to fund, a relief of type Harpoon (13, 14) protruding from the portion of the docking (5)

0) WO9736795A1 – CLOSURE DEVICE FOR BEVERAGE CANS DISPOSITIVO PA...

169) Family number: 10303959 (WO9736795A1) © PatBase

Title: CLOSURE DEVICE FOR BEVERAGE CANS

Priority: ES19960000758 19960329 ES19960002362 19961111 WO1997ES00075 19970321

Family:

Publication number	Publication date	Application number	Application date
AU199722941 A1	19971022	AU19970022941	19970321
ES2133046 AA	19990816	ES19960000758	19960329
ES2133046 BA	20000316	ES19960000758	19960329
ES2134705 AA	19991001	ES19960002362	19961111
ES2134705 BA	20000501	ES19960002362	19961111
WO9736795 A1	19971009	WO1997ES00075	19970321

Probable Assignee: MANUEL FRANCISCO GALLARDO SANC

Assignee(s):(std)**:** FEDERICO PAREDES RODENAS ; GALLARDO SANCHEZ MANUEL F ; GALLARDO SANCHEZ MANUEL FRANCI ; GOMEZ VAZQUEZ MATIAS ; PAREDES RODENAS FEDERICO ; PUIG HERRERA MIGUEL ANGEL ; MANUEL FRANCISCO GALLARDO SANC ; MIGUEL ANGEL PUIG HERRERA ; MATIAS GOMEZ VAZQUEZ

Assignee(s): MANUEL FRANCISCO GALLARDO SANCHEZ ; GALLARDO SANCHEZ MANUEL FRANCISCO

Inventor(s):(std)**:** GALLARDO SANCHEZ MANUEL FCO ; GALLARDO SANCHEZ MANUEL FRANCI ; GOMEZ VAZQUEZ MATIAS ; HERRERA MIGUEL ANGEL PUIG ; PAREDES RODENAS FEDERICO ; PUIG HERRERA MIGUEL ANGEL ; RODENAS FEDERICO PAREDES ; SANCHEZ MANUEL FRANCISCO GALLA ; VAZQUEZ MATIAS GOMEZ ; GALLARDO SANCHEZ MANUEL F ; GALLARDO SANCHEZ MANUEL

Inventor(s): MIGUEL ANGEL PUIG HERRERA ; MATIAS GOMEZ VAZQUEZ ; MANUEL FRANCISCO GALLARDO SANCHEZ ; FEDERICO PAREDES RODENAS ; GALLARDO SANCHEZ MANUEL FRANCISCO

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CH CN CU CZ DE DK EE ES FI FR GB GE GH GR HU IE IL IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG US UZ VN

International class (IPC 8–9): B65D17/50 B65D51/00 (Advanced/Invention); B65D17/00 B65D51/00 (Core/Invention)

International class (IPC 1–7): A01K63/06 A47K3/22 B65D17/50 B65D51/00

CPC: B65D17/166

European class: B65D17/16B2B

Classification Explorer

Cited documents: US4576306 A, US4078695 A, JP8244770 A2, FR2728237 A1, EP0558422 A1,

Forward Citations: WO09149846, WO0051906, US8770425, RU2493068, NL2000219, JP2011522751, DE102011010602, CN102066205,

Abstract:
The closure device for beverage cans (1) is usable in cans provided with a die–cut lid (3) and comprises an opening lever (5) which has a ring (6), a small tongue (8) hinged to the ring by means of a hinge (9), and a protuberance (10). The lever (5) is made integral with the upper base (2) of the can (1) by means of a rivet (12) about which it may rotate. It has a plug (13) made of flexible and elastic material comprised of two inseparable parts: the plug itself and means for fixing the plug (13) to the opening lever (5). The closure position of the device is obtained by rotating the opening lever by 180 degres about the fixing rivet, from the can opening position where the ring is in the position opposite to the opening.

0) US4627265A – DOUBLE ACTION CONVERSION SYSTEM

170) Family number: 29580665 (US4627265A) © PatBase

Title: Double action conversion system

Priority: US19850764716 19850812

Family:

Publication number	Publication date	Application number	Application date
DE3627179 A1	19870219	DE19863627179	19860811
DE3627179 C2	19930909	DE19863627179	19860811
GB2178678 A1	19870218	GB19860004185	19860220
GB2178678 B2	19890726	GB19860004185	19860220
GB8604185 A0	19860326	GB19860004185	19860220
HK3890 A	19900125	HK19900000038	19900118
SG8990771 A	19900420	SG19890090771	19891201
US4627265 A	19861209	US19850764716	19850812

Probable Assignee: STOLLE MACHINERY INC

Assignee(s):(std)**:** PRODUIT BERGER S A ; REDICON CORP

Assignee(s): REDICON CORP CANTON OHIO US ; STOLLE MACHINERY CO ; STOLLE MACHINERY INC ; GMAC COMMERCIAL FINANCE LLC ; NATIONAL CITY BANK

Inventor(s):(std)**:** BULSO JOSEPH D ; BULSO JOSEPH D JR ; BULSO JR JOSEPH D ; JAMES A MCCLUNG ; JOSEPH D BULSO JR ; MCCLUNG JAMES A

Inventor(s): MCCLUNG JAMES A NORTH CANTON OHIO US ; D BULSO JOSEPH ; BULSO JOSEPH D CANTON OHIO US ; A MCCLUNG JAMES

International class (IPC 8–9): B21D51/38 (Advanced/Invention); B21D51/38 (Core/Invention)

International class (IPC 1–7): B21D22/00 B21D35/00 B21D43/05 B21D51/44 B30B15/30

CPC: B21D51/383

European class: B21D51/38B

US class: 72/354 72/356 72/405.04

Classification Explorer

Cited documents: US6342404 BA, US4438840 A, US4391560 A, US4342404 A, US4273507 A, US4272980 A, US4166424 A, US4089205 A, US4019452 A, US3902347 A, US3841946 A, US3380282 A, US3366086 A, US3346948 A, US1545177 A, DE1602545 A1,

Forward Citations: WO16188420, WO16188416, US8122747, US5375513, US5102278, US2010116775, US2009293572, GB2197610, GB2197610, EP0941830, EP0351158, EP0281777, DE19827091, DE102007018778, CN104985072,

Abstract:
Source: US4627265A A conversion system for converting plain container end pieces into easy−open end pieces in a single press includes multiple slides, all driven by the press and carried within the confines of the press frame but independently adjustable and controllable. At least one of the slides carries conversion tooling and the other carries tab forming tooling and is arranged adjacent the conversion tooling so that the tab strip may be fed into the conversion tooling for attachment of the tabs to the end pieces by the conversion tooling. High speed feed rolls having helical gripping grooves are also provided to feed plain end pieces to the conversion tooling for forming and for attachment of the tabs.

0) US2010320207A – RESEALABLE CONTAINER

171) Family number: 43169244 (US2010320207A) © PatBase

Title: RESEALABLE CONTAINER

Priority: EP20080838664 20081017 SE20070002332 20071017 WO2008SE51171 20081017

Family:

Publication number	Publication date	Application number	Application date
AT545603 E	20120315	AT20080838664T	20081017
DE602008013486 D1	20120412	DE200860013486T	20081017
EP2212215 A1	20100804	EP20080838664	20081017
EP2212215 A4	20100929	EP20080838664	20081017
EP2212215 B1	20120215	EP20080838664	20081017
SE200702332 A	20090418	SE20070002332	20071017
SE200702332 L	20090418	SE20070002332	20071017
SE531748 C2	20090728	SE20070002332	20071017
US2010320207 AA	20101223	US20080734191	20081017
WO09051557 A1	20090423	WO2008SE51171	20081017

Probable Assignee: PIREN VENTURE AB

Assignee(s):(std)**:** AHLM JENNY ; BUELOW JEAN ; HANNER GERT ; PIREN VENTURE AB ; SJOEGREN JESPER

Inventor(s):(std)**:** HANNER GERT ; AHLM JENNY ; BUELOW JEAN ; SJOEGREN JESPER

Inventor(s): GERT HANNER ; JEAN BUELOW ; JENNY AHLM ; JESPER SJOEGREN

Agent(s): AWAPATENT AB; AKESSON STEN JAN AKE; HARNESS DICKEY AND PIERCE PLC

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D1/16 B65D17/34 B65D17/44 B65D39/16 B65D51/00 B65D51/22 (Advanced/Invention); B65D1/16 (Advanced/Non–invention); B65D17/00 B65D39/00 B65D51/18 (Core/Invention); B65D1/00 (Core/Non–invention)

CPC: B65D17/506 B65D51/007 B65D39/16 B65D1/165 B65D17/166 B65D51/222 B65D2251/0093 B65D2517/0043

European class: B65D1/16B B65D17/50B B65D39/16 B65D51/00F

US class: 220/270

Classification Explorer

Cited documents: WO9747525 A1, US5822843 A, US5816428 A, US5622208 A, US5292025 A, US4907722 A, US3372832 A, US3237802 A, US3159304 A, US2003089715 AA, GB909568 A, GB791247 A, GB2094276 A1, FR2742417 A1, DE3714292 A1, DE19743562 A1,

Forward Citations: WO17007042, WO14026047, US9637269, US9272819, US8985371, US8844761, US2014042164, JP6144345, JP2015528424, EP2269914, DE102009002726, CN104520202,

Abstract:
Source: US2010320207A The present invention relates to a container (1) comprising a can body (2) having an open end (21) and a closed end (22), an end closure (3) and a removable cap (4). The container (2) have a seal breaking portion (8). The end closure (3) is attached to the open end (21) of the can body (2) to form a closed compartment 5 of the container (1). The end closure (3) has an opening duct (6) extending towards the compartment (5) and having a seal (7). The cap (4) is arranged in said opening duct (6) and is movable to a position in which the seal breaking portion (8) is brought into engagement with said seal (7) for opening of the container (1).

0) US4637260A – CAN END TESTER

172) Family number: 5194159 (US4637260A) © PatBase

Title: Can end tester

Priority: US19850808552 19851213 US19860895589 19860814

Family:

Publication number	Publication date	Application number	Application date
US4637260 A	19870120	US19860895589	19860814

Probable Assignee: REYNOLDS METALS CO

Assignee(s):(std)**:** REYNOLDS METALS CO

Assignee(s): REYNOLDS METALS COMPANY

Inventor(s):(std)**:** GILLIAM EDWARD C ; JACKSON JOHN M ; LAMIE BILLY J

International class (IPC 8–9)**:** B07C5/34 (Advanced/Invention); B07C5/34 (Core/Invention)

International class (IPC 1–7)**:** G01N3/08

CPC: B07C5/34

European class: B07C5/34

US class: 73/826 73/834

Classification Explorer

Cited documents: US4519489 A, US4511044 A, US4497409 A, US4495797 A, US4390098 A, US4315688 A, US4110493 A, US4107541 A, US4044891 A, US4016968 A, US3941070 A, US3700101 A, US3688567 A, US3559471 A, US3415350 A, US3261465 A, US2905318 A, US2803343 A, US2749744 A, US2411991 A, US2321331 A, US1694828 A, JP47000902 A2,

Forward Citations: WO9003563, US5086653, US4850230,

Abstract:
Source: US4637260A An apparatus is disclosed for testing easy–open can ends. The apparatus orients the ends, opens the ends, tests the ends to assure that opening has occurred and separates defective ends which have not successfully opened from acceptable ends.

0) US2016331438A – ELECTROSURGICAL INSTRUMENT AND DEVICE WITH SUCH...

173) Family number: 63985922 (US2016331438A) © PatBase

Title: ELECTROSURGICAL INSTRUMENT AND DEVICE WITH SUCH AN INSTRUMENT

Priority: EP20150167061 20150511 JP20160095686 20160511 KR20160056195 20160509

Family:

Publication number	Publication date	Application number	Application date
BR102016009917 A2	20161116	BR20161009917	20160503
CN106137383 A	20161123	CN201610312082	20160511
EP3092966 A1	20161116	EP20150167061	20150511
IN201614010386 A	20161118	IN201614010386	20160326
JP2016209594 A2	20161215	JP20160095686	20160511
KR20160132770 A	20161121	KR20160056195	20160509
US2016331438 AA	20161117	US20160147587	20160505

Probable Assignee: ERBE ELEKTROMEDIZIN GMBH

Assignee(s):(std)**:** ERBE ELEKTROMEDIZIN

Assignee(s): ERBE ELEKTROMEDIZIN GMBH

Inventor(s):(std)**:** KIRSTGEN UDO ; PETER STANEKER ; ROMBACH THORSTEN ; STANEKER PETER ; THORSTEN ROMBACH ; UDO KIRSTGEN

Agent(s): BOHNENBERGER JOHANNES

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

International class(IPC 8–9)**:** A61B17/00 A61B18/00 A61B18/04 A61B18/12 A61B18/14 (Advanced/Invention)

CPC: A61B18/1492 A61B2017/00309 A61B2018/00196 A61B2018/00607 A61B2018/00952 A61B2018/1465 A61B18/12 A61B2018/0091 A61B18/042 A61B2017/00292 A61B2017/00424 A61B2018/00589 A61B2090/034

US class: 606/49

Classification Explorer

Cited documents: US2015119851 AA, US2015073341 AA, US2010211076 AA, US2009125023 AA, US2008200761 AA, US2008051802 AA, DE4414810 C1,

Abstract:
Source: US2016331438A The invention relates to an electrosurgical instrument, especially for argon plasma coagulation, with a handle (10), an outer shaft (12) that surrounds an electrode and/or an inner shaft (11, 111) and is held in the handle (10), and an actuation mechanism (13) on the handle (10) to move the outer shaft (12) in the axial direction relative to the electrode/to the inner shaft (11, 111). The invention is characterized in that the inner shaft and/or the electrode (11, 111) are mechanically connected with one another in a distal end area (65) of the outer shaft (12) in such a way that the inner shaft and/or the electrode (11, 111) can be bent by moving the outer shaft (12) relative to the inner shaft and/or to the electrode (11, 111).

0) US4233331A – METHOD OF SECURING OPENER KEY TO A CONTAINER US...

174) Family number: 1358069 (US4233331A) © PatBase

Title: METHOD OF SECURING OPENER KEY TO A CONTAINER USING ORIENTED POLYPROPYLENE FILM WITH SOLVENTLESS ACRYLIC ADHESIVE

Priority: US19780929489 19780731 US19800113205 19800118

Family:

Publication number	Publication date	Application number	Application date
AU197948736 A1	19800207	AU19790048736	19790706
AU528363 B2	19830428	AU19790048736	19790706
FR2432442 A1	19800229	FR19790019471	19790727
FR2432442 B1	19831125	FR19790019471	19790727
GB2026430 A1	19800206	GB19790020948	19790615
GB2026430 B2	19820616	GB19790020948	19790615
IT7949903 A0	19790731	IT19790049903	19790731
JP1481393 C3	19890210	JP19790094842	19790724
JP55022495 A2	19800218	JP19790094842	19790724
JP63030219 B4	19880616	JP19790094842	19790724
US4233331 A	19801111	US19780929489	19780731
US4309237 A	19820105	US19800113205	19800118

Probable Assignee: AMERICAN NATIONAL CAN CO

Assignee(s):(std): AMERICAN CAN CO

Assignee(s): AMERICAN CAN COMPANY ; AMERICAN CAN CY ; AMERICAN CAN PACKAGING INC ; AMERICAN NATIONAL CAN CO

Inventor(s):(std): LEMKE HAROLD C ; ROHOWETZ STANLEY E ; ROHOWETZ STANLEY EDW ; SUTANREE II ROOUETSUTSU ; HARORUDO SHII REMUKE

Inventor(s): STANLEY EDW ROHOWETZ ; HAROLD C LEMKE ; SUTANREE II ROOETSUTSU

Agent(s): PHILLIPS ORMONDE AND FITZPATRICK

International class (IPC 8–9): B21D51/38 B21D51/44 B65B61/18 B65D17/52 (Advanced/Invention); B65B61/18 (Advanced/Non–invention); B21D51/38 B65B61/18 B65D17/00 (Core/Invention)

International class (IPC 1–7): B21D51/00 B21D51/44 B29C27/20 B32B31/00 B65B55/02 B65B61/18 B65C9/08 B65D17/52

CPC: Y10S428/91 Y10T156/1339 Y10T428/24008 B21D51/383 Y10T156/1773

European class: B21D51/38B

US class: 156/332 156/521 156/568 156/85 156/87 426/131 426/407 428/910 428/99 53/133.3 53/156 53/412 53/425

Classification Explorer

Cited documents: US4181555 A, US3874034 A, US3716433 A, US3565738 A, US3110554 A, US305680 A, US2996177 A, US2921045 A, US2859200 A, US2847340 A, US2532166 A, US2456467 A, US2107311 A, US2027624 A,

Forward Citations: WO9217306, US8353147, US6971219, US6915829, US6808822, US6526725, US6282865, US6127024, US6098369, US5688346, US5190609, US4758300, US4722166, US4647333, US4605459, US4602977, US4584819, US4384915, US4372797, US4351679, US4331434, US4318765, US4317694, US2015111714, US2010061666, US2004167003, US2004123955, US2004007318, US2003134062, US2002098303, JP63300958, JP57055838, EP0271665, AU586922,

Abstract:
Source: US4233331A The present invention pertains to a machine and method of adhering a can opening key to a container and the article formed by such method and machine. More specifically, this invention pertains to the taping of a can opening key to a can body wall by means of a continuous motion high speed machine for applying a polymeric film carrying an adhesive on a surface thereof.

0) DE7100671U –

175) Family number: 16420331 (DE7100671U) © PatBase

Family:

Publication number	Publication date	Application number	Application date
DE7100671 U	19710603	DE19710000671U	19710109

Probable Assignee: PRYM W KG

Assignee(s): PRYM W KG

International class (IPC 1–7): B65D6/00

Abstract:
Source: DE7100671U (Claim 1) 1. Aufhaengbare Verkaufsdose fuer Kleineisenwaren, Kurzwaren– artikel odssgl. aus zwei miteinander in Eingriff bringbaren Schalenhaelften, deren Unterschale eine ueber eine Soll– bruchstelle angeformte abtreissbare Aufhaengelasche mit einem Durchbruch aufweist, d a d u r c h g e k a n n– z e i c h n e t, dass die Oberschale (11) an ihrer im Schliesszustand an der Aufhaengelasche (14) der Unterschale (12) befindlichen Schmalseite (21) eine gegen die Unter– schale (12) herbabgezogene und ruesselartig davon wege– bogene Handhabe (20) aufweist, die den Durchbruch (17) in der Aufhaengelasche (14) durchgreift und mit ihrem frei abstehenden Ruesselende (24) die Aufhaengelasche auf der Rueckseite (25) hinterfasst, wobei die beiden Schalen (11; 12) am, der Aufhaengelasche (14) gegenueberliegenden Dosenende je eine Haelfte (29; 32) eines bei Montage sperrend ineinander– schnappbaren Drehzapfenlagers (13) tragen.

Machine translation: (Claim 1) 1 Suspended sales outlet for small parts, haberdashery items odssgl. of two mutually engageable Schalenhaelften whose lower shell one by one predetermined breaking point has been formed abtreissbare suspension lugs with an opening dadurchgekan n designates that the upper shell (11) on its in closed state of the suspension brackets (14) of the lower shell (12) contained narrow side (21) one against the sub–shell (12) herbabgezogene and ruesselartig which–way bent handle (20), which passes through the aperture (17) in the hanging loop (14) and with their freely projecting Ruess loin (24) suspension lugs on the back (25) behind holds, where the two shells (11, 12) on, the hanging tab (14) opposite can end each one half (29, 32) carry one when mounted locking together–snap type trunnion bearing (13).

0) US2006224088A – BODY PARAMETER DETECTING SENSOR AND METHOD FOR ...

176) Family number: 33435253 (US2006224088A) © PatBase

Title: BODY PARAMETER DETECTING SENSOR AND METHOD FOR DETECTING BODY PARAMETERS

Priority:

AU20060230176 20060329 AU20120203891 20120703 AU20120216813 20120913
AU20120312045 20120921 AU20150201016 20150227 CN200680014491 20060329
US20050665797 20050329 EP20060748811 20060329 RU20070136825 20071004
JP20080504250 20060329 US20050665797P 20050329 EP20120005170 20060329
JP20140532051T 20120921 JP20160175637 20160908 US20080196914P 20081022
US20080196915P 20081022 US20080196916P 20081022 US20090211023P 20090326
US20060763869P 20060201 US20060763761P 20060201 US20060391988 20060329
US20090221767P 20090630 US20090221779P 20090630 US20090221786P 20090630
US20090221793P 20090630 US20090221801P 20090630 US20090221808P 20090630
US20090221817P 20090630 US20090221761P 20090630 US20090221788P 20090630
US20090604072 20091022 US20090604083 20091022 US20090604099 20091022
US20110017040 20110130 US20110015685 20110128 US20110014782 20110127
US20100748099 20100326 US20100748126 20100326 US20100748112 20100326
US20100748136 20100326 US20100748147 20100326 US20100826363 20100629
US20100826373 20100629 US20110014767 20110127 US20110014773 20110127
US20100825852 20100629 US20100826349 20100629 US20090221867P 20090630
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US20090221869P 20090630 US20100826349 20101006 WO2006US11300 20060329
US20110310436 20111202 US20110310321 20111202 US20120406519 20120227
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US20130858556 20130408 US20120631680 20120928 US20120631694 20120928
US20120631498 20120928 US20130910946 20130605 WO2012US56702 20120921
WO2012US56743 20120921 WO2012US56758 20120921 WO2012US56689 20120921
US20140154011 20140113 US20140182182 20140217 US20140197503 20140305
US20140199779 20140306 US20140202730 20140310 US20140223943 20140324
US20140205255 20140311 US20140294360 20140603 US20120406524 20120227
US20130830611P 20130603 US20140295242 20140603 US20130830607P 20130603
US20140275965 20140513 US20150963046 20151208 US20130140857 20131226
US20160017208 20160205 US20120405494 20120227 US20120406591 20120228
US20120460519 20120227

Family:

Publication number	Publication date	Application number	Application date
AU2006230176 AA	20061005	AU20060230176	20060329
AU2006230176 BB	20120405	AU20060230176	20060329
AU2012203891 AA	20120719	AU20120203891	20120703
AU2012203891 BB	20150507	AU20120203891	20120703
AU2012216813 AA	20121004	AU20120216813	20120913
AU2012216813 BB	20150507	AU20120216813	20120913
AU2012312045 AA	20130328	AU20120312045	20120921
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AU2012312058 BB	20150402	AU20120312058	20120921
AU2012312096 AA	20130328	AU20120312096	20120921
AU2012312106 AA	20130328	AU20120312106	20120921
AU2012312106 BB	20150528	AU20120312106	20120921
AU2015201016 AA	20150319	AU20150201016	20150227
AU2015201016 BB	20170119	AU20150201016	20150227
CA2600613 AA	20070831	CA20062600613	20060329

CA2600613 C	20161025	CA20062600613	20060329	
CA2842479 AA	20140120	CA20122842479	20120921	
CA2842483 AA	20140120	CA20122842483	20120921	
CA2842829 AA	20140122	CA20122842829	20120921	
CA2842829 C	20170117	CA20122842829	20120921	
CA2842834 AA	20140122	CA20122842834	20120921	
CN101287408 A	20081015	CN200680014491	20060329	
CN103957789 A	20140730	CN201280057671	20120921	
CN103957790 A	20140730	CN201280057874	20120921	
CN103957790 B	20170118	CN201280057874	20120921	
CN103957992 A	20140730	CN201280057871	20120921	
CN103957992 B	20161012	CN201280057871	20120921	
CN104887235 A	20150909	CN201510178035	20060329	
DE602006036295 D1	20130711	DE200660036295T	20060329	
DE602006045639 D1	20150716	DE200660045639T	20060329	
DK1868498 T3	20130603	DK20060748811T	20060329	
EP1868498 A2	20071226	EP20060748811	20060329	
EP1868498 A4	20100421	EP20060748811	20060329	
EP1868498 B1	20130515	EP20060748811	20060329	
EP2510873 A2	20121017	EP20120005170	20060329	
EP2510873 A3	20121128	EP20120005170	20060329	
EP2510873 B1	20150603	EP20120005170	20060329	
EP2510874 A2	20121017	EP20120005171	20060329	
EP2510874 A3	20121128	EP20120005171	20060329	
EP2757946 A1	20140730	EP20120832982	20120921	
EP2757946 A4	20160113	EP20120832982	20120921	
EP2757949 A2	20140730	EP20120834098	20120921	
EP2757949 A4	20150930	EP20120834098	20120921	
EP2758119 A2	20140730	EP20120832959	20120921	
EP2758119 A4	20151021	EP20120832959	20120921	
EP2929836 A1	20151014	EP20150164456	20060329	
ES2428639 T3	20131108	ES20060748811T	20060329	
GB200719382 A0	20071114	GB20070019382	20071003	
GB2440059 A1	20080116	GB20070019382	20071003	
IN03729KN2007 A	20080125	IN2007KN03729	20071003	
IN270555 B	20160101	IN2007KN03729	20071003	
JP2008534140 T2	20080828	JP20080504250T	20060329	
JP2013056173 A2	20130328	JP20120237156	20121026	
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JP2014531931 T2	20141204	JP20140532031T	20120921	
JP2014533974 T2	20141218	JP20140532051T	20120921	
JP2015504316 T2	20150212	JP20140532044T	20120921	
JP2017012785 A2	20170119	JP20160175637	20160908	
JP6008409 B2	20161019	JP20140532051T	20120921	
KR101274641 B1	20130617	KR20127030805	20060329	
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KR20070114826 A	20071204	KR20077024121	20060329	
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KR20140089522 A	20140715	KR20147010964	20120921	

KR20150000456 A	20150102	KR20147010974	20120921	
RU2007136825 A	20090510	RU20070136825	20060329	
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RU2011137826 A	20130320	RU20110137826	20110914	
RU2444287 C2	20120310	RU20070136825	20060329	
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US9345492 BB	20160524	US20140199779	20140306	
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US9492116 BB	20161115	US20150963046	20151208	
US9622701 BB	20170418	US20160017208	20160205	
WO06105098 A2	20061005	WO2006US11300	20060329	
WO06105098 A3	20071122	WO2006US11300	20060329	
WO12103549 A1	20120802	WO2012US23158	20120130	
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WO13044160 A3	20130523	WO2012US56743	20120921	
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WO13044174 A3	20130718	WO2012US56758	20120921	
ZA200708433 A	20081029	ZA20070008433	20071003	

Probable Assignee: ORTHOSENSOR INC

Assignee(s):(std)**:** ADDINK JASON ; CARRASCO GABRIEL ; CHASE ANDREW U ; ROCHE MARTIN ; ROCHE MARTIN W ; ROCHE MARTIN WILLIAM ; MARTIN ROCHE ; ORTHOSENSOR INC ; ORTHOSENSOR ; MILLER ANDREW P ; STEIN MARC ; ORTHSOSENSOR INC ; MILLER ANDREW

Assignee(s): ROCHE MARTIN FORT LAUDERDALE ; PIERCE JAY ; HENSON PHILIP ; KEGGI JOHN GRAHAM ; BONNHEIM NOAH BRYON ; BURKHARD NATALIE TRAN

Inventor(s):(std)**:** ADDINK JASON ; ANDREW U CHASE ; BONNHEIM NOAH BRYON ; BURKHARD NATALIE TRAN ; CHASE ANDREW ; CHASE ANDREW U ; COHEN MATTHEW J ; HENSON PHILIP ; JOHN GRAHAM KEGGI ; KEGGI JOHN GRAHAM ; KIM YOONG JOONG ; LIDDELL CHELSEA A ; MARC STEIN ; MILLER ANDREW P ; NATALIE TRAN BURKHARD ; NOAH BRYON BONNHEIM ; PHILIP HENSON ; PIERCE JAY ; ROCHE MARTIN WILLIAM ; STEIN MARC ; ROCHE MARTIN W ; ROCHE MARTIN ; MARTIN ROCHE ; CARRASCO GABRIEL ; MILLER ANDREW ; KEGGI JOHN ; BURKHARD NATALIE ; BONNHEIM NOAH

Agent(s): BAXTER IP; BAXTER PATENT ATTORNEYS PTY LTD; SPRUSON AND FERGUSON; BLAKE CASSELS AND GRAYDON LLP; RIDOUT AND MAYBEE LLP; GOWLING LAFLEUR HENDERSON LLP; GOWLING WLG CANADA LLP; KRAUS AND WEISERT PATENTANWAELTE PARTGMBB; BANZER HANS JOERG; LAWRENCE JOHN; MEIER FLORIAN; LEHMANN MARIA ISABEL; AI ASSOCIATION OF PATENT AND TRADEMARK ATTORNEYS; GREGORY L MAYBACK PA; MAYBACK AND HOFFMAN PA; GREGORY L; REBECCA A; THOMAS; MAYBACK AND HOFFMAN P A; MAYBACK GREGORY L ET AL; WATTS ALLAN W; BENYI STEPHEN K

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA

LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8–9): A61B17/16 A61B17/56 A61B17/58 A61B17/60 A61B17/86 A61B5/00 A61B5/01 A61B5/02 A61B5/05 A61B5/07 A61B5/103 A61B5/107 A61B5/11 A61B5/117 A61B5/145 A61B5/1455 A61B5/1459 A61B5/22 A61B8/00 A61B8/08 A61F2/00 A61F2/02 A61F2/08 A61F2/30 A61F2/38 A61F2/44 A61F2/46 A61F2/48 A61F2/76 A61N1/00 A61N1/05 A61N1/08 A61N1/34 A63B21/00 A63B23/16 G01L1/00 G01L3/24 G01L5/00 H04B1/38 (Advanced/Invention); A61B19/00 A61B5/00 A61B5/01 A61B5/02 A61B5/11 A61B8/00 A61F2/30 A61F2/38 A61F2/46 (Advanced/Non–invention); A61B5/00 A61B5/02 A61B5/05 A61B5/103 A61F2/08 A61F2/30 (Core/Invention); A61B (Subclass/Invention)

International class (IPC 1–7): A61B5/103

CPC: A61B17/025 A61B2017/00221 A61B2017/0268 G06Q50/22 G06Q50/24 A61B5/05 A61B2562/0247 A61B2560/0209 A61B5/1076 G01L1/165 G01L1/255 A61B5/1116 A61B5/1121 A61B5/412 A61B5/4561 A61B5/7225 A61B5/0017 A61B5/6867 A61B2505/05 A61B2560/063 A61B2562/046 A61F2002/30604 A61B5/1032 A61B5/4571 A61B5/447 A61B5/4504 A61B5/4523 A61B5/4533 A61B5/107 A61B5/6847 A61B5/14507 A61B5/1455 A61B17/1615 A61B5/14539 A61B5/0082 A61B8/0875 A61B5/0048 A61B5/0086 A61B5/1459 A61B5/4585 A61B5/686 A61B2560/0406 A61B2562/24 A61B8/565 A61N1/36071 A61F2/3603 A61B5/103 A61B2562/028 A61F2/4684 A61F2002/4658 A61F2002/4668 A61F2002/4672 A61F2250/0002 A61F2/32 A61B5/11 A61B2562/0219 A61B5/0008 A61B5/0022 A61B5/0084 A61F2/3859 A61F2002/30565 A61F2002/30589 A61F2002/30607 A61F2002/30668 A61F2002/30672 A61F2002/30772 A61B5/076 A61B2090/064 A61B2090/065 A61B2562/0252 A61B2562/182 A61B8/58 A61B5/01 A61F2/468 A61F2002/469 A61F2250/0093 A61B2560/0219 A61B5/6861 Y10T29/49826 A61F2/4657 A61B17/1666 A61B5/7275 A61B5/1036 A61B5/0031 A61B5/6878 A61B5/6882 A61F2/38 A61F2/389 A61F2002/30616 A61F2002/3067 A61F2002/3895 A61F2002/4666 A61B5/4509 A61B5/6846 A61B5/4528 A61B5/4851 A61B2090/3782

European class: A61B5/00B8 A61B5/00B9 A61B5/05 A61B5/07D A61B5/103 A61B5/11 A61B5/11P A61B5/11S A61B5/41D A61B5/44B10 A61B5/45B A61B5/45B4 A61B5/45H A61B5/45K A61B5/45M A61B5/45R4 A61B5/68D A61B8/08R A61F2/46M A61F2/46T K61B562/02C K61B562/02N K61F2/30A5A2 K61F2/46M1 K61F2/46M14 K61F2/46M4 K61F2/46M6 K61F250/00D2

US class: 1/1 600/300 600/301 600/301 600/301P 600/302 600/309 600/310 600/407 600/438 600/473 600/476 600/504 600/504S 600/587 600/587P 600/595 600/595S 606/102 606/80 606/81 606/90 607/46 607/46P 623/17.11 623/18.11 623/20.14 623/20.32 623/20.35 623/8

Classification Explorer

Cited documents: WO9726833, WO9628089, WO200515177, WO10022272 A1, WO08120215 A2, WO08120215, WO07126917 A2, WO06098759 A1, WO06097759 A1, WO05120203, WO05015177 A1, WO04057279 A1, WO03036247 A1, WO03005877 A2, WO0215769, WO02087435, WO0137733 A2, WO0038572, WO0018294 A1, USD285968 S1, US9271675 BB, US9259179 BB, US8956418 BB, US8720270 BB, US8689647 BB, US8661893 BB, US8516884 BB, US8498711 BB, US8494805 BB, US8449556 BB, US8444654 BB, US8421642 BA, US8372153 BB, US8372147 BB, US8328873 BB, US8295920 BB, US8270253 BA, US8245583 BB, US8211041 BB, US8197549 BB, US8187280 BB, US8169185 BB, US8167823 BB, US8157869 BB, US8141437 BB, US8118815 BB, US8099168 BB, US8098544 BB, US8078440 BB, US8070754 BB, US8070695 BB, US8000926 BB, US7918887 BB, US7917223 BB, US7886618 BB, US7849751 BB, US7837691 BB, US7819826 BB, US7794499 BB, US7769947 BB, US7763075 BB, US7725288 BB, US7716988 BB, US7710124 BB, US7668201 BB, US7643862 BB, US7632283 BB, US7630774 BB, US7615055 BB, US7606613 BB, US7587945 BB, US7580753 BB, US7578821 BB, US7575602 BB, US7559951 BB, US7547307 BB, US7542791 BB, US7533571 BB, US7527632 BB, US7525309 BB, US7522701 BB, US7520179 BB, US7519422 BB, US7517363 BB, US7488324 BA, US7477926 BB, US7470288 BB, US7458977 BB, US7454972 BB, US7445605 BB, US7442196 BB, US7412897 BB, US7396336 BB, US7384403 BB, US7378916 BB, US7366562 BB, US7347817 BB, US7344493 BB, US7325640 BB, US7325460 BB, US7313491 BB, US7295724 BB, US7291540 BB, US7283867 BB, US7266989 BB, US7256695 BB, US7215599 BB, US7206627 BB, US7195654 BB, US7195645 BB, US7190273 BB, US7179295 BB, US7173749 BB, US7156853 BB, US7153281 BB, US7141020 BB, US7097662 BB, US7080554 BB, US7035077 BB, US7029477 BB, US7022141 BB, US7018416 BB, US7001346 BB, US6993393 BB, US6984993 BB, US6925339 BB, US6920347 BB, US6859661 BB, US6856141 BB, US6821299 BB,

US6796988 BB, US6758850 BB, US6739068 BA, US6719806 BA, US6714763 BB, US6708063 BB, US6701174 BA, US6689999 BB, US6656135 BB, US6645214 BB, US6638228 BA, US6621278 BB, US6583630 BB, US6582365 BA, US6573706 BB, US6558391 BB, US6505076 BB, US6505076 BA, US6505075 BA, US6493588 BA, US6447448 BA, US6443891 BA, US6429585 BA, US6425920 BA, US6347245 BA, US6304766 BA, US6258126 BA, US6245109 BA, US6228089 BA, US6171252 BA, US6171252 B1, US6165142 A, US6159611 A, US6115636 A, US6090114 A, US6072784 A, US6070469 A, US6063091 A, US6033370 A, US6014588 A, US5921929 A, US5900592 A, US5873368 A, US5871018 A, US5853745 A, US5733292 A, US5702464 A, US5702429 A, US5688279 A, US5683396 A, US5669914 A, US5650571 A, US5569260 A, US5524624 A, US5470354 A, US5456724 A, US5447076 A, US5425775 A, US5413604 A, US5360016 A, US5197488 A, US5119676 A, US5052934 A, US5042489 A, US4986281 A, US4983533 A, US4936308 A, US4920279 A, US4902958 A, US4899761 A, US4864463 A, US4857893 A, US4848164 A, US4764804 A, US4731762 A, US4524766 A, US4480485 A, US4277758 A, US4195367 A, US4146022 A, US4127110 A, US4092597 A, US4066082 A, US3727616 A, US3573782 A, US3486163 A, US2013253378 AA, US2013225982 AA, US2013079670 AA, US2012283600 AA, US2012277752 AA, US2012226359 AA, US2012209117 AA, US2012202775 AA, US2012190940 AA, US2012163683 AA, US2012157887 AA, US2012152017 AA, US2012035868 AA, US2012027775, US2012016362 AA, US2011275957 AA, US2011257491 AA, US2011217775 AA, US2011160738 AA, US2011160738, US2011160616 AA, US2011160572 AA, US2011152913 AA, US2011107850 AA, US2011102455 AA, US2011092972 AA, US2011060220 AA, US2011032184 AA, US2011029913 AA, US2011004124 AA, US2011004076 AA, US2010332152 AA, US2010331738 AA, US2010331737 AA, US2010331736 AA, US2010331735 AA, US2010331734 AA, US2010331733 AA, US2010331683 AA, US2010331682 AA, US2010331681 AA, US2010331633 AA, US2010331633, US2010328098 AA, US2010328077 AA, US2010327880 AA, US2010326211 AA, US2010326210 AA, US2010320973 AA, US2010280617 AA, 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CN101254103 A, CN101106958 A,

Forward Citations: WO17047978, WO17031152, WO17007752, WO16172313, WO16113440, WO16094826, WO16076838, WO16027056, WO15196131, WO15130636, WO14071193, WO12057868, WO11057765, WO08130406, WO08052367, WO07090159, USD766113, USD743822, US9675321, US9655750, US9649119, US9642676, US9633538, US9622701, US9615887, US9597090, US9585615, US9585597, US9579043, US9566020, US9555245, US9554411, US9549742, US9545459, US9539116, US9538953, US9529025, US9519021, US9504576, US9498276, US9492290, US9492238, US9492116, US9492115, US9462964, US9456862, US9456769, US9427337, US9414940, US9408705, US9408557, US9402583, US9381011, US9380961, US9358136, US9357964, US9345492, US9345449, US9339212, US9301720, US9289163, US9283028, US9271675, US9265447, US9259179, US9259172, US9226694, US9161717, US9144495, US9107580, US9095284, US8968412, US8963708, US8945231, US8942662, US8939030, US8915866, US8838249, US8740817, US8721568, US8689647, US8685093, US8679189, US8597210, US8562617, US8556830, US8551023, US8521492, US8376937, US8197489, US8137277, US8126736, US8100950, US8095198, US8078440, US8078282, US8051720, US7993269, US7976534, US7918796, US7842092, US7822465, US7766862, US7734353, US7682355, US7611483, US7604629, US7328131, US2017020626, US2016166201, US2016134327, US2016015311, US2016007909, US2015133785, US2015112445, US2015073496, US2015038881, US2014379090, US2014318247, US2014309560, US2014277526, US2014236308, US2014206967, US2014206958, US2014031672, US2013281793, US2013261504, US2013261450, US2013226035, US2013217352, US2013103160, US2013072982, US2012288839, US2012283600, US2012238911, US2011295159, US2011184245, US2011066079, US2010332152, US2010331679, US2010250284, US2010249535, US2010249534, US2010204551, US2010100011, US2010076563, US2009299153, US2009163957, US2009005708, US2008300510, US2008269898, US2008262380, US2008262374, US2008262332, US2008262331, US2008262323, US2008262322, US2007238992, US2007232958, US2007219639, US2007179568, RU2592129, KR101219710, JP2014210105, JP2013212375, JP2012529308, JP2010017369, FR2952518, EP3058865, EP2490732, CN105832448, CN105380734, CN105380734, CN105342730, CN104116620, CN103458830, CN103458830, CN103140168, CN102740771,

Abstract:
Source: US2006224088A A method for detecting biometric parameters includes the steps of performing a bone graft procedure on a vertebra of a spine, providing a biometric sensor at the vertebra, and measuring a biometric parameter at the vertebra with the sensor. The sensor is capable of measuring parameters in an adjacent surrounding including pressure, tension, shear, relative position, and vascular flow. Data relating to the biometric parameter is transmitted to an external source and the data are analyzed to evaluate a biometric condition of the vertebra. A set of the sensors can be placed on transverse processes of the vertebra.

177) Family number: 58022577 (DE102013210669A1) © PatBase

Title: SCHWUNGRAD FUER EINE KURBELWELLE EINER BRENNKRAFTMASCHINE FLYWHEEL FOR A CRANKSHAFT OF AN INTERNAL COMBUSTION ENGINE (Machine translation)

Priority: DE201310210669 20130607

Family:

Publication number	Publication date	Application number	Application date
DE102013210669 A1	20141211	DE201310210669	20130607

Probable Assignee: SCHAEFFLER TECHNOLOGIES GMBH

Assignee(s):(std)**:** SCHAEFFLER TECHNOLOGIES GMBH

Assignee(s): SCHAEFFLER TECHNOLOGIES GMBH AND CO KG

Inventor(s):(std)**:** FISCHER ALEXANDRE ; HUBER LIONEL ; STRASSER PASCAL

International class (IPC 8–9): F16F15/30 (Advanced/Invention)

CPC: F16F15/13114

Classification Explorer

Cited documents: DE19952143, DE102011102001, DE102011079054,

Abstract:
Source: DE102013210669A1 Die Erfindung betrifft ein Schwungrad fuer eine Kurbelwelle einer Brennkraftmaschine mit einem radial aussen angeordneten Anlasserzahnkranz und einem axial zu diesem angeordneten Geberring mit zur Erfassung von Drehkennwerten des Schwungrads ueber den Umfang verteilt angeordneten Markierungen. Um eine kostenguenstige und zu einer Verschweissung alternative Befestigung des Geberrings am Schwungrad zu ermoeglichen, ist der Geberring mittels einer drehschluessigen Verdrehsicherung drehfest und mittels des Anlasserzahnkranzes axial gesichert an dem Schwungrad aufgenommen. The invention relates to a flywheel for a crankshaft of an internal combustion engine comprising a radially outer flywheel ring gear and an axially arranged on this transmitter ring with for detecting rotational parameters of the flywheel about the circumferentially spaced markings. To enable cost alternative to welding and mounting the encoder ring on the flywheel, the encoder ring is rotationally fixed by means of a drehschluessigen rotation and added axially secured by means of the starter ring gear on the flywheel.

0) US3486665A – DISPENSING CAN WITH PLASTIC TOP

178) Family number: 894330 (US3486665A) © PatBase

Title: DISPENSING CAN WITH PLASTIC TOP

Priority: US19670672171 19671002

Family:

Publication number	Publication date	Application number	Application date
US3486665 A	19691230	US19670002171	19671002

Probable Assignee: AMERICAN NATIONAL CAN CO

Assignee(s):(std)**:** AMERICAN CAN CO

Assignee(s): AMERICAN CAN PACKAGING INC ; AMERICAN NATIONAL CAN CO

Inventor(s):(std)**:** LACROCE LEONARD THOMAS

Inventor(s): LEONARD THOMAS LACROCE

International class (IPC 8–9): B65D47/26 (Advanced/Invention); B65D47/04 (Core/Invention)

International class (IPC 1–7): B65D47/10 B65D83/06 B67D3/00

CPC: B65D47/265 B65D17/163 B65D2517/0013 B65D2517/0041

European class: B65D47/26D4

US class: 220/253 222/480 222/541.9 222/561

Classification Explorer

Cited documents: US3372832 A, US3366270 A, US3332565 A, US3273760 A, US3217949 A, US3100589 A, US2961132 A, US2765094 A,

Forward Citations: USRE32927, USD714144, USD596029, USD582274, USD582273, USD533452, USD532691, USD532298, USD530610, USD513452, USD509426, USD448295, USD442086, US9475623, US8955705, US8827185, US8820563, US8066158, US7637154, US6691901, US6422426, US6286703, US5894965, US5850944, US5791528, US5671875, US5632417, US5547109, US5542579, US5509582, US5509579, US5507419, US5489049, US5487494, US5465871, US5411186, US5383582, US5308182, US5305931, US5275304, US5213238, US5205430, US5199591, US5195645, US5193704, US5186353, US5161713, US5143248, US4930654, US4793510, US4657139, US4589569, US4574975, US4574972, US4548331, US4541541, US4526291, US4462507, US4346823, US4274563, US4135331, US3889842, US3734360, US2013105484, US2009202692, US2008093394, US2006027588, GR1000293, GR1000293, FR2588532, EP0849186,

Abstract:
Source: US3486665A ABSTRACT OF THE DISCLOSURE A snap−on plastic top attaches to the removable end of a full−open can. The top has an annular downwardly extending skirt with an annular bead on the inner side thereof to permit the top to be pushed down and snapped over the end seam of an open can. The top has a rotatable outer cover with a spoon hole, pouring spout and a group of shaker holes and which can be turned to align either of these dispensing openings with an orifice in a stationary transverse wall below the rotatable top to select the manner in which the product is to be dispensed.

0) US2007119314A – CULINARY HAND PRESS AND METHODS FOR USE

179) Family number: 34502529 (US2007119314A) © PatBase

Title: CULINARY HAND PRESS AND METHODS FOR USE

Priority: US20050739660P 20051125 US20060594526 20061107

Family:

Publication number	Publication date	Application number	Application date
US2007119314 AA	20070531	US20060594526	20061107
US7578233 BB	20090825	US20060594526	20061107

Probable Assignee: ACKER JR PHILLIP F

Assignee(s):(std)**:** ACKER JR PHILLIP F ; ACKER PHILLIP F JR

Inventor(s):(std)**:** ACKER JR PHILLIP F ; ACKER PHILLIP F JR

Inventor(s): ACKER PHILLIP FJR ; ACKER PHILLIP ; ACKER PHILLIP F

Agent(s): MARTINE PENILLA AND GENCARELLA LLP

International class (IPC 8–9): B02C15/00 B30B9/04 (Advanced/Invention); B30B9/04 (Advanced/Non–invention); B02C15/00 B30B9/02 (Core/Invention); B30B9/02 (Core/Non–invention)

CPC: A47J19/06

European class: A47J19/06

US class: 100/110 100/112 100/116 100/125 100/126 100/130 100/243 99/504 99/505 99/510

Classification Explorer

Cited documents: WO05087063 A1,

Forward Citations: US9237822, US9226608, US7302887, US2016242587, US2009025575, US2007181012, EP2580999,

Abstract:
Source: US2007119314A A hand press includes a body, a movable handle and a hinge pivotally coupling a proximal end of the movable handle to the body. The body includes a pressing container having one or more side walls and a bottom and a ratchet mechanism. The ratchet mechanism includes a plunger shaft, a plunger coupled to a first end of the plunger shaft, a driver engaging the plunger shaft and an actuator link coupled between the movable handle and the driver. The plunger forms a top of the pressing container. A method for pressing items using the hand press is also disclosed.

0) US2013302558A – PAIR OF COMPLEMENTARY ARTICLES OF CLOTHING

180) Family number: 51510123 (US2013302558A) © PatBase

Title: PAIR OF COMPLEMENTARY ARTICLES OF CLOTHING

Priority: DE201110008470 20110113 US20130941348 20130712 WO2012EP00106 20120111 US20140177060 20140210

Family:

Publication number	Publication date	Application number	Application date
DE102011008470 A1	20120719	DE201110008470	20110113
DE102011008470 B4	20130704	DE201110008470	20110113
US2013302558 AA	20131114	US20130941348	20130712
US2014220291 AA	20140807	US20140177060	20140210
US9516901 BB	20161213	US20140177060	20140210
WO12095310 A1	20120719	WO2012EP00106	20120111

Probable Assignee: ST ANTONI LLC

Assignee(s):(std)**:** SCHOENBECK DEWI ; SCHOENBECK JOHN ; ST ANTONI LLC

Assignee(s): SCHOENBECK

Inventor(s):(std)**:** SCHOENBECK DEWI ; SCHOENBECK JOHN

Agent(s): DOUGLAS N; BROOKS ACORDIA IP LAW PC; BEHR WOLFGANG ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): A41B11/00 A41D19/00 A41D27/00 D06F93/00 (Advanced/Invention)

CPC: A41B11/002 A41D19/0034 Y10T428/24008

European class: A41B11/00C

US class: 2/160 2/239 428/99

Classification Explorer

Cited documents: WO12095310 A1, USD511888 S1, USD473706 S1, US8359671 BA, US7302712 BB, US7150081 BB, US7058986 BB, US6990694 BB, US6463636 BA, US6397393 BB, US6374420 BB, US6237158 BA, US6216279 BA, US6185751 BA, US6185745 BA, US6092241 A, US6032294 A, US5974590 A, US5970524 A, US5918318 A, US5740558 A, US5699557 A, US5038413 A, US4165555 A, US3699617 A, US2014090149 AA, US2013302558 AA, US2012311768 AA, US2011209268 AA, US2010011486 AA, US2008222778 AA, US2008034478 AA, US2007256280 AA, US2004154075 AA, US2004123430 AA, US2004123377 AA, FR2840511 A1, DE3803799 A1, DE10010656 A1,

Forward Citations: USD773797, USD742787, USD727613, US9516901, US2015059060, DE102013014735, DE102013014735,

Abstract:
Source: US2013302558A A pair of complementary articles of clothing, in particular a pair of socks, including first and second complementary articles of clothing that can be detachably connected to each other, wherein the detachable connection is made by first and second complementary connecting elements, which are each fastened to the article of clothing by a carrier element, wherein one of the ends of each carrier element forms a gripping area without a connecting function, so that the connection between the first and the second connecting element can be detached by pulling on the gripping areas of the carrier elements.

0) DE9102413U1 –

181) Family number: 17665382 (DE9102413U1) © PatBase

Priority: DE19910002105U 19910222 DE19910002413U 19910228

Family:

Publication number	Publication date	Application number	Application date
DE9102413 U1	19910508	DE19910002413U	19910228

Probable Assignee: BEHNEKE PETER 8000 MUENCHEN DE

Assignee(s): BEHNEKE PETER 8000 MUENCHEN DE

International class (IPC 8–9): B65D17/32 B65D17/50 (Advanced/Invention); B65D17/00 B65D17/28 (Core/Invention)

International class (IPC 1–7): B65D17/32 B65D17/50

CPC: B65D17/166 B65D2517/0023

European class: B65D17/16B2B L65D517/00Y3A

Classification Explorer

Forward Citations: WO9308087, WO12019313, WO04056667, WO04043801, US7500577, US5775534, FR2973780, EP0937650, DE4438069, DE19942013, DE19909861, DE19542101,

Abstract:
Source: DE9102413U1 (Claim 1) Getraenkedose Schutzansprueche 1. Getraenkedose mit einer Lasche mit einem ringfoermigen Griffteil, einem Aufbrechende und einem sich vom Aufbrechende am Griffteil erstreckenden Befestigungslappen, der mit einer oeffnung versehen ist, durch die eine Niete zur Befestigung der Lasche am Dosendeckelspiegel ragt, sowie mit einem durch das Aufbrechende unter Bildung einer Entleerungsoeffnung eindrueckbaren Giessfeldbereich, dadurch gekennzeichnet, dass das ringfoermige Griff teil (3) mit einem Gitter (11) versehen ist und bei Drehung der Lasche (2) um die Niete (6) auf die Entleerungsoeffnung (10) diese abdeckt.

Machine translation: (Claim 1) Getraenkedose Schutzansprueche first Getraenkedose with a strap with a ring–shaped handle, a break–up and one from breaking the handle portion extending fastening flap, which is provided with an opening through which a rivet to attach the tab on the can lid mirror stands, and with one by breaking with the formation of a Entleerungsoeffnung pressed in Giessfeldbereich, wherein the ring–shaped handle is in part (3) with a grid (11) and provided with rotation of the flap (2) around the rivet (6) on the Entleerungsoeffnung (10) covers this.

0) WO9220584A1 – TEAR–OFF LID, IN PARTICULAR METALLIC TEAR–OFF L...

182) Family number: 17886104 (WO9220584A1) © PatBase

Title: TEAR–OFF LID, IN PARTICULAR METALLIC TEAR–OFF LID, RECLOSABLE MANY TIMES, FOR EASY–TO–OPEN CONTAINERS

Priority: DE19910006042U 19910513 WO1992DE00407 19920513

Family:

Publication number	Publication date	Application number	Application date
AU199216955 A1	19921230	AU19920016955	19920513
DE9106042 U1	19910912	DE19910006042U	19910513
WO9220584 A1	19921126	WO1992DE00407	19920513

Probable Assignee: PASEWALD ECKHARD

Assignee(s):(std)**:** PASEWALD ECKHARD

Assignee(s): PASEWALD ECKHARD O 1130 BERLIN DE ; ECKHARD PASEWALD

Inventor(s):(std)**:** PASEWALD ECKHARD

Inventor(s): ECKHARD PASEWALD

Designated states: AT AU BB BE BF BG BJ BR CA CF CG CH CI CM CS DE DK ES FI FR GA GB GN GR HU IT JP KP KR LK LU MC MG ML MN MR MW NL NO PL RO RU SD SE SN TD TG US

International class (IPC 8–9)**:** B65D17/28 B65D17/32 B65D17/50 B65D41/32 B65D47/36 B65D53/00 B65D8/02 (Advanced/Invention); B65D17/00 B65D17/28 B65D41/32 B65D47/00 B65D53/00 B65D8/00 (Core/Invention)

International class (IPC 1–7)**:** B65D17/28 B65D17/32 B65D47/36 B65D53/00 B65D8/02

CPC: B65D17/166

European class: B65D17/16B2B

Classification Explorer

Cited documents: US4865215 A, US4834258 A, US4717039 A, US4463866 A, EP0078397 A2, DE9005150 U,

Forward Citations: WO09118339, US8469218, DE19750783, DE102011010602, AU2009228812,

Abstract:
A tear–off lid has a gripping loop (6) secured to the lid surface by a rivet located in the axis of the can. By exerting a pressure on a partially scored opening zone (5), an end of the gripping loop (6) presses the opening zone into the inside of the container. To make it possible to close again the opening zone (5), a closure blade arranged between the surface of the lid and the gripping loop (6) and equally secured to the rivet is mechanically linked to the rotatable gripping loop.

0) US4932130A – KEY FOR GRIPPING AND PIERCING A BEVERAGE CAN

183) Family number: 3473368 (US4932130A) © PatBase

Title: Key for gripping and piercing a beverage can

Priority: US19880275336 19881123

Family:

Publication number	Publication date	Application number	Application date
US4932130 A	19900612	US19880275336	19881123

Probable Assignee: HOLLANDER JASON E

Assignee(s):(std)**:** HOLLANDER JASON E

Inventor(s):(std)**:** HOLLANDER JASON E

International class (IPC 8–9)**:** B67B7/50 (Advanced/Invention); B67B7/00 (Core/Invention)

International class (IPC 1–7)**:** B67B7/50

CPC: B67B7/24

European class: B67B7/24

US class: 30/450

Classification Explorer

Cited documents: US3305924 A, US2867900 A, US2734204 A, US2707827 A,

Forward Citations: US2014237952,

Abstract:
Source: US4932130A A key for gripping a beverage can end while simultaneously allowing piercing of the can body. The key has a rigid shaft, one end adapted for use as a handle, and a forked construction at the other end defining two arms. The first arm is adapted to pierce a can body as the second arm engages the can rim. The second arm has at its end a rim–gripping formation shaped to grip the can rim and serve as a fulcrum as the handle is rotated causing the first arm to pierce the can and form an opening therein.

0) US2009301456A – LOADING PELLETS IN PELLET GUNS

184) Family number: 43925307 (US2009301456A) © PatBase

Title: LOADING PELLETS IN PELLET GUNS

Priority: US20080125324P 20080424 US20090428600 20090423

Family:

Publication number	Publication date	Application number	Application date
US2009301456 AA	20091210	US20090428600	20090423
US8291894 BB	20121023	US20090428600	20090423
WO09131709 A1	20091029	WO2009US02550	20090424

Probable Assignee: BARWICK JR BILLIE JOHN

Assignee(s):(std)**:** BARWICK BILLIE JOHN JR ; BARWICK JR BILLIE JOHN

Inventor(s):(std)**:** BARWICK BILLIE JOHN JR ; BARWICK JR BILLIE JOHN

Agent(s): JOHN B WOODARD; JOHN B; WOODARD JOHN BRUCE

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): F41A9/06 F41A9/61 F41F1/00 (Advanced/Invention); F41A9/00 (Core/Invention)

CPC: F41B11/54 F41B11/55

European class: F41B11/54 F41B11/55

US class: 124/45 124/45P

Classification Explorer

Cited documents: US871355 A, US869484 A, US7954480 BB, US7017569 BB, US6824011 BA, US6736125 BB, US6688298 BB, US6666203 BB, US6530368 BA, US6098835 A, US5666937 A, US5544642 A, US5520171 A, US5361746 A, US5335579 A, US5285766 A, US5165383 A, US5054221 A, US5014877 A, US4993400 A, US4986251 A, US4831998 A, US4819609 A, US4507889 A, US4173211 A, US4164929 A, US4004566 A, US3984000 A, US391811 A, US3913553 A, US3741189 A, US3619929 A, US3463136 A, US2609811 A, US2502909 A, US211691 A, US2008029076 AA, US2005210608 AA, US1816091 A, GB2395770 A1, GB2281959 A1, GB2162928 A1,

Forward Citations: US9500437, US9335116, US9021735, US8387606, US2014174421, US2013091752,

Abstract:
Source: US2009301456A Loading pellets into a pellet gun, whether it is of breech or break barrel design, is often a frustrating and difficult procedure, especially when done with the fingers. The pellets are small and hard to handle. Various embodiments of a dispenser for dispensing pellets to a breech design or a break barrel design pellet gun without touching them are described. The frustration and other difficulties usually encountered by pellet gun users are avoided by the dispensers delivering the pellets directly to pellet guns.

0) WO14174082A1 – RECLOSABLE CAN END WALL, CAN END UNIT, CLOSURE ...

185) Family number: 57696553 (WO14174082A1) © PatBase

Title: RECLOSABLE CAN END WALL, CAN END UNIT, CLOSURE BODY AND CAN

Priority: DE201310104226 20130425

Family:

Publication number	Publication date	Application number	Application date
DE102013104226 A1	20141030	DE201310104226	20130425
DE102013104226 B4	20150910	DE201310104226	20130425
WO14174082 A1	20141030	WO2014EP58467	20140425

Probable Assignee: SOOTH JUERGEN

Assignee(s):(std)**:** SOOTH JUERGEN

Inventor(s):(std)**:** SOOTH JUERGEN

Agent(s): PRINZ AND PARTNER

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/00 B65D17/32 B65D17/50 B65D43/16 (Advanced/Invention)

CPC: B65D17/166 B65D17/506 B65D17/161 B65D21/0209

Classification Explorer

Cited documents: WO7901094 A1, WO12112051 A2, WO11095319 A1, US7198168 BB, US4582216 A, US4405056 A, US4383621 A, US4356929 A, US2012273490 AA, GB1389351 A, FR2742417 A1, EP0392078 A2,

DE212005000007 U1

DE19643487 A1,

DE102006054788 A1

Forward Citations: WO16128797,

Abstract:
An end wall (10) of a can, in particular a beverage can, has an edge (14), an end wall surface (16) surrounded by the edge (14), and a closed, predetermined drinking opening (20) which is closed by a closure section (23) of the end wall (10), which closure section is actuable only once. The drinking opening (20) can be at least partially exposed manually by direct actuation of an auxiliary device (18) attached to the end wall surface (16). A fastening means serves for fastening a closure body (36) with which the exposed drinking opening (20) is reclosable in a liquidtight manner. The fastening means is arranged radially between drinking opening (20) and auxiliary device (18), on the one hand, and edge (14), on the other hand. Furthermore, an end wall unit, a closure body and a can are described.

0) DE1902686A1 – BELEUCHTUNGSVORRICHTUNG MIT EINER DREHVERSTELLB...

186) Family number: 364107 (DE1902686A1) © PatBase

Title: BELEUCHTUNGSVORRICHTUNG MIT EINER DREHVERSTELLBAREN STRAHLERLEUCHTE LIGHTING DEVICE WITH A ROTATING LIGHT ADJUSTABLE SPOTLIGHT (Machine translation)

Priority: DE19691902686 19690121

Family:

Publication number	Publication date	Application number	Application date
DE1902686 A1	19700820	DE19691902686	19690121
DE1902686 B2	19710325	DE19691902686	19690121

Probable Assignee: REININGHAUS AND CO

Assignee(s):(std)**:** REININGHAUS AND CO

International class (IPC 8–9)**:** F21V21/34 H01R25/14 (Advanced/Invention); F21V21/34 H01R25/00 (Core/Invention)

International class (IPC 1–7)**:** F21V21/14 F21V21/34 H01R25/14

CPC: H01R25/142 F21V21/35

European class: F21V21/34 H01R25/14B

Classification Explorer

Forward Citations: DE3813095,

Abstract:
Source: DE1902686A1 (Claim 1) 1. Beleuchtungsvorrichtung mit einer an einer Befestigungsflaeche zu befestigenden hohlen Tragleiste, die nach einer Seite hin offen ist und in ihrem Hohl– raum von innen her zugaengliche Leitungsschienen aufnimmt, und mit einem eine Strahlerleuchte tragenden Anschlusskasten, wobei die Strahlerleuchte in einem U–foermigen Buegel gehalten ist, der seinerseits um eine achse senkrecht zur Befestigungsflaeche gebremst drehverstellbar ist, d a d ur c h g e k e n n z e i c h n e t, dass im Boden des inschlusskastens (B) undrehbar ein mit einem Kopf (28a) und mit einem Leitungsdurchlass (28b) versehenes Leitungsaustrittsnippel (28) mit iussengewinde (28c) sitzt, wobei am anschlusskastenseitigen Ende des iussengewindes (28c) eine Stuetzschulter vorgesehen ist, gegen den der Buegel (25) sich abstutzt, und dass anderseits auf dem Aussengewinde (280) des Nippels (28) eine mit Innen gewinde versehene Buechse (23) verschraubbar ist, deren Mantel mit wenigstens einem axialen, einseitig offenen Schlitz (33) begrenzter Laenge versehen ist, wobei die Buechse (23) mit einem stufenfoermig einwaerts abgesetzten axialen Bremsmantel (34) in die Lagerbohrung des Buegels (25) eingreift und durch eine Querspann– schraube (35) aufspreizbar ist.

Machine translation: (Claim 1) 1 Lighting device with one at a Befestigungsflaeche to be attached hollow support bar that to one side is open and in its cavity from the inside absorbs Accessible pipeline rails, and with a one spot light transmitting terminal box, with the Spot Light is held in a U–shaped bracket which in turn perpendicular to an axis–braked to Befestigungsflaeche is rotationally adjustable, chgekennzeichnet dad for that in the bottom of inschlusskastens (B) non–rotatable one with a head (28a) and having a line passage (28b) provided cable outlet nipple (28) with iussengewinde (28c) sits, is being provided by the terminal box end of the iussengewindes (28c) a Stuetzschulter, against the ironing (25) is braced, and that on the other hand, on the outer thread (280) of the nipple (28) is internally threaded bushing (23) screwed, is their coat is provided with at least one axial, single open slot (33) of limited length, with the sleeve (23) with a step–like inward stepped axial brake casing (34) into the bearing hole of the bracket (25) intervenes and through a cross–clamping screw (35) is spread open.

187) Family number: 48019860 (US2013146592A) © PatBase

Title: SUPPLEMENTAL LIQUID STORAGE DEVICE ATTACHABLE TO A PRIMARY BEVERAGE CONTAINER

Priority: US20090211139P 20090326 US20090496502 20090701 US20120684568 20121125 US20130758980 20130204

Family:

Publication number	Publication date	Application number	Application date
BR102012031177 A2	20130924	BR20121031177	20121207
US2013146592 AA	20130613	US20130758980	20130204
US8365960 BA	20130205	US20090496502	20090701
US8662351 BB	20140304	US20130758980	20130204
WO11003048 A1	20110106	WO2010US40852	20100701

Probable Assignee: KALAOUZE FADI

Assignee(s):(std)**:** KALAOUZE FADI

Assignee(s): FADI KALAOUZE

Inventor(s):(std)**:** KALAOUZE FADI ; MCCLUNG DAVID

Inventor(s): FADI KALAOUZE

Agent(s): MARK; MARK YOUNG PA; YOUNG MARK

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D81/32 B67D7/74 B67D7/78 (Advanced/Invention)

CPC: B65D81/3211

European class: B65D81/32B1

US class: 206/221 206/222 206/229 215/45 215/6 215/902 220/23.83 220/254.9 220/271 220/501 220/712 220/713 220/810 220/906 222/129 222/145.5 222/153.07 222/166 222/488 222/570 426/115

Classification Explorer

Cited documents: US8083055 BB, US7377383 BB, US6540112 BA, US6176395 BA, US5108003 A, US5071042 A, US4579257 A, US4576306 A, US3887069 A, US3851800 A, US3335893 A, US3116855 A, US2007138179 AA, US2004007594 AA, GB1241985 A,

Forward Citations: WO15136519, WO15113963, WO13036692, USD731238, US9622605, US9596880, US9199779, US9114910, US9102441, US2016207675, US2016052674, US2016044953, US2016044938, US2015232318, US2015129613, US2014339253, US2013297840, US2009311389, EP2753553, DE102014101073,

Abstract:
Source: US2013146592A A secondary container assembly includes a skirt configured to securely and removably engage the rim of a beverage can. The secondary container includes a secondary compartment holding a secondary liquid. A primary flow channel extends through the secondary container to provide a fluid flow path from the open beverage can to an outlet of the secondary container. A plurality of mixing apertures provide fluid communication ports between the secondary compartment and the primary flow channel, allowing the secondary liquid to mix with beverage from the can in the primary flow channel. A vent tube prevents a vacuum from forming that would otherwise impede flow of the secondary liquid into the primary flow channel. A removable seal covers the outlet and mixing ports. A threaded lid holds the seal in place.

0) DE102012107435A1 – EINSTELLBARE BEFESTIGUNG ADJUSTABLE FASTENER F...

188) Family number: 55799610 (DE102012107435A1) © PatBase

Title: EINSTELLBARE BEFESTIGUNG ADJUSTABLE FASTENER FOR RETAINING ASSEMBLY OF HEADLIGHT TO RECEIVING BODY OF VEHICLE, HAS WORM WHEEL INCLUDING THREADED PORTION, AND FORCE–TRANSMITTING BODY FORMED BETWEEN HEADLIGHT AND RECEIVING BODY OF VEHICLE

Priority: DE201210107435 20120814

Family:

Publication number	Publication date	Application number	Application date
DE102012107435 A1	20140220	DE201210107435	20120814

Probable Assignee: HELLA KGAA HUECK AND CO

Assignee(s):(std)**:** HELLA KGAA HUECK AND CO

Inventor(s):(std)**:** WILLEKE FRANZ GEORG

International class (IPC 8–9): B60Q1/04 (Advanced/Invention)

CPC: B60Q1/0683 F16C1/02 F16C1/22

Classification Explorer

Cited documents: US4689725 A, EP0692404 A2, DE10324656 A1,

DE102007053430 A1

Abstract:
Source: DE102012107435A1 Die vorliegende Erfindung betrifft eine einstellbare Befestigung (1) zur haltenden Anordnung eines Scheinwerfers (10) an einen Aufnahmekoerper (11) eines Fahrzeugs, aufweisend ein Schneckenrad (12), in das eine Schneckenwelle (13) in Eingriff steht, sodass bei einer Drehung der Schneckenwelle (13) das Schneckenrad (12) in Drehung versetzbar ist. Erfindungsgemaess ist vorgesehen, dass das Schneckenrad (12) einen Gewindeabschnitt (14) aufweist, wobei der Gewindeabschnitt (14) ein Innengewinde (15) und ein Aussengewinde (16) umfasst und einen kraftuebertragenden Koerper zwischen dem Scheinwerfer (10) und dem Aufnahmekoerper (11) bildet, wobei das Innengewinde (15) und das Aussengewinde (16) zueinander unterschiedlich ausgefuehrt sind. The fastener (1) has a worm wheel (12) in which a worm shaft (13) is engaged, so that the worm wheel is set in rotation upon rotation of the worm shaft. The worm wheel includes a threaded portion (14) having an internal thread (15) and an external thread (16). A force–transmitting body is formed between a headlight (10) and a receiving body (11) of a vehicle, where the internal thread and the external thread are made different from each other such that the internal thread and the external thread differs by the thread pitch.

0) DE102015205754A1 – PENDELMASSE UND FLIEHKRAFTPENDELEINRICHTUNG PE...

189) Family number: 63714318 (DE102015205754A1) © PatBase

Title: PENDELMASSE UND FLIEHKRAFTPENDELEINRICHTUNG PENDULUM AND CENTRIFUGAL PENDULUM DEVICE (Machine translation)

Priority: DE201510205754 20150331

Family:

Publication number	Publication date	Application number	Application date
DE102015205754 A1	20161006	DE201510205754	20150331

Probable Assignee: SCHAEFFLER TECHNOLOGIES AG

Assignee(s):(std)**:** SCHAEFFLER TECH AND CO AG KG ; SCHAEFFLER TECHNOLOGIES AG

Assignee(s): SCHAEFFLER TECHNOLOGIES AND CO AG KG

Inventor(s):(std)**:** BOSSECKER MAXIMILIAN

International class (IPC 8–9): F16F15/131 F16F15/14 (Advanced/Invention)

CPC: F16F15/145

Classification Explorer

Cited documents: DE102009042836 A1

DE102009042804 A1

Abstract:
Source: DE102015205754A1 Pendelmasse (102) fuer eine Fliehkraftpendeleinrichtung (100) mit einem Pendelmassetraeger (106), insbesondere fuer einen Antriebsstrang eines brennkraftmaschinengetriebenen Kraftfahrzeugs, die Pendelmasse (102) aufweisend wenigstens eine Pendelmasseausnehmung (110) fuer ein Waelzelement (108) zur verlagerbaren Anordnung der Pendelmasse (102) an dem Pendelmassetraeger (106), wobei die Pendelmasse (102) mehrere Lagen (112, 114) und wenigstens ein zwischen den Lagen (112, 114) angeordnetes Zwischenblech (104) aufweist und zur Bildung der wenigstens einen Pendelmasseausnehmung (110) die Lagen (112, 114) jeweils wenigstens eine Lagenausnehmung und das wenigstens eine Zwischenblech (104) wenigstens eine Zwischenblechausnehmung (116) aufweisen/aufweist, und Fliehkraftpendeleinrichtung (100), insbesondere fuer einen Antriebsstrang eines brennkraftmaschinengetriebenen Kraftfahrzeugs, die Fliehkraftpendeleinrichtung (100) aufweisend eine Drehachse, einen um die Drehachse drehbaren Pendelmassetraeger (106) und wenigstens eine an dem Pendelmassetraeger (106) entlang einer Pendelbahn zwischen zwei Endlagen verlagerbar angeordnete Pendelmasse, wobei die Fliehkraftpendeleinrichtung (100) wenigstens eine derartige Pendelmasse (102) aufweist. Pendulum (102) for a centrifugal pendulum device (100) with a pendulum mass support (106), in particular for a power train of an internal combustion engine powered vehicle, the pendulum (102) showing up at least a pendulum mass recess (110) for a rolling element (108) to the verlagerbaren arrangement of the pendulum (102) on the pendulum mass carrier (106), whereby the pendular (102) several layers (112, 114) and at least one between the layers (112, 114) has arranged intermediate plate (104) and to the formation of at least one of the pendulum mass recess (110) the layers (112, 114) each at least a location hole and that at least an intermediate plate (104) have at least an intermediate metal part (116) / has, and centrifugal pendulum device (100), pointing in particular to a drive train of an internal combustion engine powered vehicle, the centrifugal pendulum device (100) an axis of rotation, one rotating pendulum mass carrier (106) and at least a pendular verlagerbar arranged on the pendulum mass carrier (106) along a gondola between two end positions, with the centrifugal pendulum device (100) having at least a such pendulum (102) to the axis of rotation.

0) NL9301501A – CAN LID FOR (COLD) DRINKS CAN, PROVIDED WITH AN...

190) Family number: 9305737 (NL9301501A) © PatBase

Title:	Can lid for (cold) drinks can, provided with an opening lip
Priority:	NL19930001501 19930831

Family:

Publication number	Publication date	Application number	Application date
NL9301501 A	19950316	NL19930001501	19930831

Probable Assignee:	LOUIS JOHANNES JOSEPH SMEETS
Assignee(s):(std):	LOUIS JOHANNES JOSEPH SMEETS
Assignee(s):	LOUIS JOHANNES JOSEPH SMEETS BRUSSELSESTRAAT 65
International class (IPC 8–9):	B65D17/30 (Advanced/Invention); B65D17/28 (Core/Invention)
International class (IPC 1–7):	B65D17/30
CPC:	B65D17/166 B65D2517/0014 B65D2517/0034
European class:	B65D17/16B2B L65D517/00Y2C L65D517/00Y5A1

Classification Explorer

Abstract:
The invention relates to a can lid used for drinks cans provided with a lip which is attached to the lid. Exerting an upwardly directed force on the lip results in the drinking hole being opened and in the possibility of using the drink from the can. In order to be able to close the opened can again, the can lid is provided with a sealing lip which at its attachment point on the lid can be made to rotate over the opened drinking hole and is held in place by rotating the lip under a raised flange which is attached to the side of the drinking hole.

0) CH152454A – BREMSEINRICHTUNG FUER SCHIENENFAHRZEUGE MIT FER...

191) Family number: 29550844 (CH152454A) © PatBase

Title: BREMSEINRICHTUNG FUER SCHIENENFAHRZEUGE MIT FERNGESTEUERTEM AUSRUECKBAREM HEMMSCHUH. STOPPING DEVICE FOR RAILWAY with remote AUSRUECKBAREM obstacle. (Machine translation)

Family:

Publication number	Publication date	Application number	Application date
CH152454 A	19320131		19301224

Probable Assignee: OBERBAUFORSCHUNG U RANGIERTE

Assignee(s):(std): OBERBAUFORSCHUNG U RANGIERTE ; OBERBAUFORSCHUNG UND RANGIERTE

Assignee(s): F OBERBAUFORSCHUNG U RANGIERTECHNIK M B H GES ; GESELLSCHAFT FUER OBERBAUFORSCHUNG UND RANGIERTECH ; GESELLSCHAFT FUER OBERBAUFORSCHUNG UND RANGIERTECHNIK M B H

Inventor(s):(std): F OBERBAUFORSC GES ; GESELLSCHAFT FUER OBERBAUFORSC

Inventor(s): GESELLSCHAFT FUER OBERBAUFORSCHUNG UND RANGIERTECH ; GESELLSCHAFT FUER OBERBAUFORSCHUNG UND RANGIERTECHNIK M B H ; F OBERBAUFORSCHUNG U GES ; F OBERBAUFORSCHUNG U RANGIERTECHNIK M B H GES

International class (IPC 1–7): B61H7/10

Abstract:
Source: CH152454A PATENTANSPRUCH: Bremseinrichtung fuer Schienenfahrzeuge mit –ferngesteuertem aus.rueckbarem Hemm– Schuh mit auf.dessen Sohle;sitzendem Bock, der als Anschlag fuer das Rad des zu brem senden Fahrzeuges dient, dadurch..gekenn zeichnet, dass der sich beim Bremsen gegen das zu bremsende Rad des Fahrzeuges an– legende Hemmschuhbock an einem Arm be– festigt ist, der drehbar an der Hemmschuh sohle gelagert ist, so dass die Bremsung durch.seitliches Schwenken des Hemms,ehuhbo,ckes von der Fahrschiene aufgehoben werden kann, waehrend die Hemmschuhsohle unver aendert auf der Fahrschiene liegen bleibt. and lt;B and gt;UNTERANSPRUECHE: and lt;/B and gt; 1. Bremseinrichtung nach Patentanspruch, –dadurch gekennzeichnet, dass die Hemm– schuheohle mit Auslegern und Leisten ausser auf der Fahrschiene noch auf einer Beischiene',aufliegt und dass der schwenk bar gelagerte Hemmschuhbock durch eine Lasche mit einem auf der Beis,chiene gleitenden Klemmstueck verbunden ist, das mit der Hemmschulusohle durch eine loesbare Klinke kuppelbar ist. z. Bremseinrichtung nach Patentanspruch und Unteranspruch 1, gekennzeichnet durch einen an dem Klemmstueck vomge– sehenen Anschlag und einen ortsfesten Anschlag neben der Beischiene, der beim Rueckwaertsbewegen des Hemmschuhes gegen den Anschlag des Klemmstueckes anschlaegt, wodurch das Klemmstueck zu– rueckgehalten und der Hemmschuhbock in die Bremsstellung umgeschwenkt wird. 3. Bremseinrichtung nach Patentanspruch, gekennzeichnet durch einen. an dem den Hemms,chuhbock tragenden Armdrehbar gelagerten spiralfoermigen, sich gegen den Fahrschienenkopf legendem Ausrueck– koerper, der sich bei der Drehung am Fahrschienenkopf abwaelzt, wodurch der Hemmsohulhbo@ck seitlich ausgeschwenkt wird, sowie durch einen loesbaren Riegel an dem Ausrueckkoerper und eine den Riegel in der Bremsstellung aufnehmende Rast an der Hemmschuhsohle fuer den Riegel. 4. Bremseinrichtung nach. Patentanspruch und Unteranspruch and lt;B and gt;3 and lt;/B and gt;, dadurch gekenn– zeichnet, dass mit der Hemmschuhsohle einerseits und dem den Hemmschuhbock tragenden Arm anderseits eine Feder verbunden ist, die bei der Bewegung des Bockes in: die Freigabelage.gespannt wind. 5. Bremseinrichtung nach Patentanspruch und Unteranspruch 8, dadurch Bekenn zeichnet, dass an dem drehbar gelagerten, spiralfoermigen Auesrueckkoerper eine Trom mel fuer zwei Seile sitzt, und zwar fuer ein zur Kommandostelle fuehrendes Steuerseil, sowie ein an der Sohle befe stigtes guppeleeil, und dass mit detr Trommel eine Feder verbunden ist, die bei der Bewegung des Bockes in die Freigabelage gespannt wird. 6. Bremseinrichtung nach Patentanspruch, dadurch gekennzeichnet, dass ein den Bock tragender Arm in der Bremsstel lung sich gegen einen Riegel stuetzt, der durch Festhalten eines waehrend des Bremsens mitlaufenden Seils aus der Stuetzlage unter Anspannung einer Feder bewegt werden kann, dass der Arm fer ner eine Nase traegt, die der Riegel in der Freigabelage fasst, und dass schliesslich eine Feder angeordnet ist, die bei der Be wegung des Armes in die Freigabelage gespannt wird, das Ganze derart, dass durch einen Zug am Seil die Bremsung beendigt und durch einen zweiten Zug der Hemmschuh in die Bremsstellung gebracht wird. i. Bremseinrichtung nach Patentanspruch, gekennzeichnet durch eine an dem den Hemmschullbock tragenden Arm befe stigte Fuehrungsrolle, eine neben der Bei– Schiene liegende mit schraegen Schlitzen versehene Ausrueckschiene, durch deren Schlitze die Fuehrungsrolle abgelenkt werden kann, und eine neben der Aus, rueckschiene angeordnete heb– und senk bare Abdeckschiene, durch die das Ab lenken der Fuehrungsrolle durch die Schlitze der Auesrueckschiene verhindert werden kann. B. Bremseinrichtung nach Patentanspruch, gekennzeichnet durch ein–an dein Hemm schuh befestigtes Rueckholseil,.eine Seil trommel und eine mit der letzteren ge– kuppelte elektrische Maschine. 9. Bremseinrichtung nach Patentanspruch und Unteranspruch 8, gekennzeichnet, durch ein an den Klemmen der elek– trischen Maschine liegendes Voltmeter und eine die Seilbewegung hemmende be sondere Einrichtung, die von Hand auf Grund der Angaben: des Voltmeters ge

steuert werden kann. 10. Bremseinrichtung nach Patentanspruch und Unteranspruch $, dadurch gekenn zeichnet, dass, ein an den Klemmen der elektrischen Maschine liegendes Volt meter mit einer Kontakteinrichtung ver sehen, ist, die beim Sinken der Ge– sehwindigkeit unter einen eingestellten Wert die Bremseinrichtung derairt be– einflusst,,dass die Bremsung unterbrochen wird. 11. Bremseinrichtung nach Patentanspruch und Unteranspruch 8, gekennzeichnet durch eine Bremsschalteinrichtung fuer die mit der Seiltrommel,gekuppelte elek– trische 1Nas liine, welche.eine Hemmung der Seilbewegung ermoeglicht. 12. Bremseinrichtung nach. Patentanspruch, dadurch gekennzeichnet, dass,eine Trom mel fuer ein zum Zurueckholen des Hemm schuhes dienendes Seil ein Stueck vordem Anfang der Bremsstrecke– aufgestellt ist, ferner @dass vor der Bremsstrecke ein Herzstueck und –daran anschliessend eine abgebogene Schiene eingebaut sind, mit– telst der der Hemmschuh durch Anziehen.des Seils aus dem Bereich von die Brems– strecke durchlaufenden Fahrzeugen, ins besondere Lokomotiven,,gebracht wer– @den kann. 18. Bremseinrichtung nach Patentanspruch und Unteranspruch 12, dadurch gekenn zeichnet, dass– im Bereich des Herzstueckes ein Druckfederpuffer angeordnet ist, dessen Feder beim Zurueckziehen des Hemmschuhes gespannt wird, derart, dass nach dem Freizeben des Seils der Hemm–.s.chuh selbsttaetig wieder in die Brems– bereitschaftsstellung gebracht wird. CLAIM: brake device for rail vehicles with –ferngesteuertem aus.rueckbarem inhibitory shoe with sole auf.dessen; sitting Bock, who serves as a stop for the wheel of the vehicle to send brem, dadurch..gekenn records that when applying the brakes against the to be braked wheel of the vehicle other legend Hemmschuhbock on an arm is fastened pivotally mounted on the brake shoe sole, so that the braking durch.seitliches pivoting of Hemm's, ehuhbo, ckes can be lifted from the rail, while the Hemmschuhsohle without changes to the running rail remains lying. and lt; B and gt; UNTERANSPRUECHE: and lt; / B and gt; 1. braking system according to claim –dadurch in that the inhibitory schuheohle with outriggers and bars except on the rail or on a side rail ', rests and that the swivel–mounted Hemmschuhbock connected by a tab with one on the Beis, sliding–track Klemmstueck is, which is coupled with the Hemmschulusohle with a releasable latch. z. The braking device according to claim and dependent claim 1, characterized by a vomge– to the Klemmstueck down stop and a fixed stop next to the side rail that abuts the Rueckwaertsbewegen of Hemmschuhes against the stop of the Klemmstueckes, whereby the Klemmstueck to–rueckgehalten and Hemmschuhbock in the braking position is changed sides. 3. Braking device according to patent claim, characterized by a. where the Hemm's, chuhbock carrying Armdrehbar mounted, spiral, located legendem against the running rail head disengagement body, the rolls are in the rotation on the chassis rail head, causing the Hemmsohulhbo @ ck is swung laterally, as well as by a releasable latch on the Ausrueckkoerper and the bolt receiving in the braking position at the detent Hemmschuhsohle for the bolt. 4. A brake device according. Claim and dependent claims and lt; B and gt; 3 and lt; / B and gt;, charac– terized in that is the Hemmschuhsohle the one hand and the Hemmschuhbock arm carrying the other hand, a spring connected that with the movement of the goat in: Freigabelage.gespannt the wind. 5. brake device according to claim and dependent claim 8, characterized records confess that at the rotatably mounted, spiral, Auesrueckkoerper a Trom mel for two ropes sitting, namely for a leading fabless for command post control cable, and a at the sole stigtes BEFE guppeleeil, and that with DETR drum, a spring is connected, which is stressed in the movement of the goat into the release position. 6. braking system according to claim, characterized in that the bracket supporting arm in the brake Stel development is supported against a bolt which can be moved by retaining a while braking revolving cable from the Stuetzlage under tension of a spring that the arm fer ner a nose carries that holds the bolt in the release position, and that in the end is a spring that is stretched at the loading movement of the arm in the release position, the arrangement being such that terminated by a train on the rope braking and second by a train the stumbling block is brought into the braking position. i. Braking device according to patent claim, characterized by one of the the Hemmschullbock supporting arm BEFE stigte guide roller, one lying beside the two rails provided with inclined slots Ausrueckschiene through whose slots, the guide roller can be deflected, and in addition to the stop, rueckschiene arranged raisable – and perpendicular face cover rail, by directing the From the guide roller can be prevented through the slots of Auesrueckschiene. B. brake device according to claim, characterized by a shoe–in your Hemm fixed return cable, rope drum.a and with the latter total pimped electric machine. 9. braking system according to claim and dependent claim 8, in lying by a tric at the terminals of elec– machine voltmeter and the cable movement inhibiting be special means of hand due to the data: can be controlled ge of the voltmeter. 10. A brake device according to claim and dependent claim $, characterized in that a lying at the terminals of the electrical machine volt meter with a contact device to see ver, is that sehwindigkeit the sinking of the total is below a set value derairt the braking device influenced,, that braking is interrupted. 11. A brake device according to claim and dependent claim 8, characterized by a brake switch means for those with the cable drum, coupled electrical 1Nas liine allows welche.eine inhibition of cable movement. 12. A brake device according. Claim, characterized in that a Trom mel for you to Pre Bringing Hemm, shoe serving rope a piece is placed anterior to the top of Bremsstrecke– furtherdass before the braking distance a Herzstueck and –daran then a bent rail mounted, medium–telst of the obstacle by Anziehen.des rope from the range of the braking distance passing vehicles can be brought to the special locomotives,,den. 18. A brake device according to claim and dependent claim 12, characterized records marked that– in the area of Herzstueckes a compression spring buffer is arranged, the spring is stretched during Pre pulling the Hemmschuhes such that selbsttaetig after Freizeben the rope of the restriction.s.chuh again is brought readiness position to the brake.

0) GB2278335A – RESEALABLE EASY–OPEN CAN

192) Family number: 13098447 (GB2278335A) © PatBase

Title: Resealable easy–open can

Priority: GB19930010645 19930524

Family:

Publication number	Publication date	Application number	Application date
GB2278335 A1	19941130	GB19940010243	19940523
GB9310645 A0	19930707	GB19930010645	19930524
GB9410243 A0	19940713	GB19940010243	19940523

Probable Assignee: SEPEHR FEREIDOON

Assignee(s):(std)**:** SEPEHR FEREIDOON

Assignee(s): FEREIDOON SEPEHR

Inventor(s):(std)**:** SEPEHR FEREIDOON

Inventor(s): FEREIDOON SEPEHR

International class (IPC 8–9)**:** B65D17/34 (Advanced/Invention); B65D17/28 (Core/Invention)

International class (IPC 1–7)**:** B65D17/34

CPC: B65D17/166

European class: B65D17/16B2B

Classification Explorer

Cited documents: US5129773, US4673099, GB2255081,

Forward Citations: US8556104, GB2305657,

Abstract:
Source: GB2278335A The ring 2 of a ring–pull can is used when rotated, to seal the opening formed on pulling the ring, a holder 3 (12, Figure 4) formed on the can end holding the ring down to seal the opening. The lower surface of the ring may be coated by a flexible plastics material to provide adequate sealing of the aperture. The can may contain beer or carbonated beverage.

0) GB2063137A – METHOD AND APPARATUS OF FEEDING MATERIAL FOR PR...

193) Family number: 30961960 (GB2063137A) © PatBase

Title: METHOD AND APPARATUS OF FEEDING MATERIAL FOR PROGRESSIVE PUNCHING

Priority: CA19800357235 19800729 JP19790102740 19790814 JP19980274079 19790814

Family:

Publication number	Publication date	Application number	Application date
AU198061173 A1	19810219	AU19800061173	19800808
AU521568 B2	19820408	AU19800061173	19800808
CA1135175 A1	19821109	CA19800357235	19800729
GB2063137 A1	19810603	GB19800024786	19800729
GB2063137 B2	19840704	GB19800024786	19800729
JP56026637 A2	19810314	JP19790102740	19790814

Probable Assignee: TOYO SEIKAN KAISHA LTD

Assignee(s):(std)**:** TOYO SEIKAN KAISHA LTD

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Inventor(s):(std)**:** KAWAMUKAI KIKUO ; KAWAMUKI KIKUO ; YAMAZAKI EIKICHI

Inventor(s): EIKICHI YAMAZAKI ; KIKUO KAWAMUKAI

Agent(s): GRIFFITH HACK; FETHERSTONHAUGH AND CO

International class (IPC 8–9): B21D28/06 B21D43/06 B26D3/00 (Advanced/Invention); B21D28/02 B21D43/04 (Core/Invention)

International class (IPC 1–7): B21D43/04 B21D43/06 B26D3/00 B30B15/30

CPC: B21D28/06 B21D43/06

European class: B21D28/06 B21D43/06

Classification Explorer

Forward Citations: WO05105335, US4733552, JP62124037, GB2347889, FR2530507, EP2823908, EP0456205, EP0100271,

Abstract:
Source: GB2063137A In a method of feeding strip material in a progressive punching process, a finger provided downstream of a punching station adapted to progressively punch the sheet material is moved backwardly by one pitch in synchronization with the downward movement of a ram and is then moved forwardly by one pitch in synchronization with the upward movement of the ram, to pull–feed the sheet material engaged with the finger by one pitch. An apparatus for practising the method comprises: the finger 17; means, including a plate cam 18 and follower roll 19 and a spring 20, for moving the finger forwardly by one pitch in synchronization with the upward movement of the ram 3 and for returning the finger to its original position in synchronization with the downward movement of the ram; and spring means (not shown) for causing the finger returned to the original position to be engaged with a punched hole in the sheet material.

0) US2005177224A – VASCULAR FIXATION DEVICE AND METHOD

194) Family number: 32142024 (US2005177224A) © PatBase

Title: VASCULAR FIXATION DEVICE AND METHOD

Priority: US20040776570 20040211

Family:

Publication number	Publication date	Application number	Application date
US2005177224 AA	20050811	US20040776570	20040211

Probable Assignee: THOMAS J FOGARTY

Assignee(s): DREWS MICHAEL J ; FOGARTY THOMAS J ; HOLMGREN NEIL ; MODESITT D B ; THOMAS J FOGARTY ; VAN HOFTEN JAMIE J

Inventor(s):(std): DREWS MICHAEL J ; FOGARTY THOMAS J ; HOLMGREN NEIL ; MODESITT D B ; VAN HOFTEN JAMIE J

Inventor(s): VAN HOFTEN JAMIE JULIANA ; MODESITT D BRUCE ; VAN HOFTEN JAMIE ; MODESITT D ; FOGARTY THOMAS ; DREWS MICHAEL

Agent(s): DAVID A LEVINE

International class (IPC 8–9): A61F2/06 (Advanced/Invention); A61F2/06 A61F2/86 (Advanced/Non–invention)

International class (IPC 1–7): A61F2/06

CPC: A61F2/07 A61F2/86 A61F2002/061 A61F2002/065 A61F2002/075 A61F2002/8486 A61F2/89

European class: A61F2/07 K61F2/06A K61F2/06D K61F2/848E K61F2/86

US class: 606/151 606/151S 623/1.35 623/1.350P 623/1.36 623/1.360S

Classification Explorer

Cited documents: US6585760 BA, US6494889 BA, US6409757 BA, US6361556 BA, US6344056 BA, US6287335 BA, US6273909 BA, US6248122 BA, US6214036 BA, US6152956 A, US6102940 A, US6015431 A, US5800526 A, US5728131 A, US5713917 A, US5676697 A, US5676696 A, US5628783 A, US5609627 A, US5593442 A, US5591195 A, US5578071 A, US5360443 A, US4577631 A, US4553545 A, US2004073288 AA, US2004073190 AA, US2003195607 AA, US2003130724 AA, US2002151957 AA, US2002107565 AA, US2002099441 AA, US2002082682 AA, US2002077693 AA, US2002058986 AA, US2002013809 AA, US2001044621 AA,

Forward Citations: WO12145245, WO07079410, WO07079081, US9636117, US9615831, US9517121, US9517069, US9510835, US9375218, US9375210, US9277924, US9259229, US9132025, US9005270, US8979893, US8911490, US8906082, US8747451, US8734479, US8728144, US8562638, US8382814, US8317818, US8252051, US8172746, US8092484, US8057537, US7998188, US7901450, US7892278, US7846200, US7833265, US2015272559, US2014194970, US2013268046, US2011112632, US2010286769, US2010217382, US2010063533, US2010007865, US2009318951, US2009306764, US2009306703, US2009234438, US2009234437, US2009234435, US2009234434, US2009209996, US2009043371, US2008082159, US2008082158, US2008082154, US2006259127, US2005131520, JP2016179185, EP1857073,

Abstract:
Source: US2005177224A An intravascular anchoring implant is disclosed. The present invention also relates to the attachment to the intravascular implant of second and possibly third implants, such as a graft attachment device and a vascular graft. Methods of using the implant within the vasculature of the body, particularly adjacent to vascular aneurysms, are also disclosed

0) US8328582B – SHORTENED ADAPTER FOR LIGHT BULB SOCKETS WITH M...

195) Family number: 52539334 (US8328582B) © PatBase

Title: SHORTENED ADAPTER FOR LIGHT BULB SOCKETS WITH MINIATURE REMOTE CONTROLLER

Priority: US20090148994P 20090201 US20100694685 20100127 US20100694733 20100127 US20120678796 20121116 US20130939518 20130711

Family:

Publication number	Publication date	Application number	Application date
US8328582 BA	20121211	US20100694685	20100127
US8508148 BA	20130813	US20100694733	20100127
US9135812 BA	20150915	US20120678796	20121116
US9202368 BA	20151201	US20130939518	20130711

Probable Assignee: MAGICLUX LLC

Assignee(s):(std)**:** ALLEN DANIEL J ; CARLEY ADAM L ; MAGICLUX LLC ; D AMELIO ANTHONY D ; MANDRY JAMES EDWARD ; WEISBERG LEONARD R

Inventor(s):(std)**:** ALLEN DANIEL J ; ALLEN DANIELLE G ; MANDRY JAMES EDWARD ; CARLEY ADAM L ; WEISBERG LEONARD R ; D AMELIO ANTHONY D

Agent(s): EDELL SHAPIRO AND FINNAN LLC

International class (IPC 8–9): G08C17/02 G08C19/16 H01R13/66 H01R24/00 H01R25/00 H05B33/08 H05B37/02 H05B39/04 H05B41/282 H05B41/36 H05B41/392 (Advanced/Invention)

CPC: F21V17/06 F21V23/06 H01R33/9453 H05B37/0272 H05B39/041 H01R33/94 G08C17/02

European class: H01R33/94 H01R33/945B

US class: 1/1 200/51.02 315/291 439/620.02 439/642

Classification Explorer

Cited documents: WO0057678 A1, US8508148 BA, US8328582 BA, US8253866 BA, US8149084 BB, US7812738 BB, US7659674 BB, US7633230 BB, US7597452 BB, US7556398 BB, US7248144 BB, US7106261 BB, US6995682 BA, US6917167 BB, US6906477 BB, US6828733 BA, US6727665 BB, US6650029 BA, US6340864 BA, US6218787 BA, US6215396 BA, US6188810 BA, US5744913 A, US5731663 A, US5463286 A, US5121287 A, US5068576 A, US4754255 A, US4649323 A, US4023035 A, US3893019 A, US3781593 A, US3543088 A, US3517259 A, US3496451 A, US3452215 A, US3433967 A, US3420552 A, US3392293 A, US3248534 A, US3070767 A, US3028523 A, US2546554 A, US2244044 A, US2222655 A, US2218173 A, US2177806 A, US2037653 A, US2011012730 AA, US2009256489 AA, US2009251352 AA, US2009059603 AA, US2008316047 AA, US2008218099 AA, US2008111491 AA, US2008061668 AA, US2007273477 AA, US2007188103 AA, US2007176766 AA, US2007080819 AA, US2006116667 AA, US2005285448 AA, US2005236998 AA, US2005231134 AA, US2005155942 AA, US2005017871 AA, US2003134591 AA, US2003016119 AA, US2003015302 AA, US1854842 A, US1605800 A,

Forward Citations: WO15059608, USD774470, USD769227, USD768581, USD755739, USD755736, USD755133, USD754617, USD713361, USD713360, US9615428, US9462665, US9413104, US9320122, US9269921, US9202368, US9185753, US9135812, US8853950, US2017027040, US2016270194, US2016255475, US2016079701, US2015130596, US2015035454, US2014273892, US2014099801, US2013234876, US2013020955, US2012097982, TWI495397,

Abstract:
Source: US8328582B A shortened adapter for a light bulb socket with highly overlapped male and female parts with an insulating hand–ring that extends only partially over the external surface of the adapter's female threading so it fits into the unthreaded collar of a light bulb socket, thereby significantly reducing the light bulb displacement. The shortened adapter can respond to an incoming signal and control the output of a light bulb. A reversible ring on the insulating hand–ring can change the adapter from being a dimmer to being an on–off control. A mechanism is disclosed to reversibly lock the adapter onto a light bulb. A miniature remote controller to work with the adapter is provided that has many advantages because of its very small size and compact shape. Further, one such controller can control several lights and several such controllers can control a single light in arbitrary combinations selected by the user.

0) US2016031472A – PANEL SEALING APPARATUS AND A METHOD OF ASSEMBL...

196) Family number: 61594092 (US2016031472A) © PatBase

Title: PANEL SEALING APPARATUS AND A METHOD OF ASSEMBLING THE PANEL SEALING APPARATUS

Priority: US20140445550 20140729

Family:

Publication number	Publication date	Application number	Application date
BR102015012430 A2	20160531	BR20151012430	20150528
CN105313799 A	20160210	CN201510449264	20150728
DE102015111708 A1	20160204	DE201510111708	20150720
US2016031472 AA	20160204	US20140445550	20140729

Probable Assignee: GM GLOBAL TECHNOLOGY OPERATIONS LLC

Assignee(s):(std)**:** GM GLOBAL TECH OPERATIONS INC

Assignee(s): GM GLOBAL TECHNOLOGY OPERATIONS LLC ; GM GLOBAL TECHNOLOGY OPERATIONS LLC N D GES D STAATES DELAWARE

Inventor(s):(std)**:** ALLEN TODD E ; LEE SEUNG H

Inventor(s): SEUNG H LEE ; TODD E ALLEN

International class(IPC 8–9)**:** B60R13/06 B62D1/16 B62D1/20 B62D3/02 F16B21/02 F16B21/09 F16J15/16 F16J15/52 (Advanced/Invention)

CPC: B62D1/16 B62D3/02 F16J15/16

US class: 277/300 277/500

Classification Explorer

Cited documents: US7371181 BB, US5426993 A, CN1910076 A, CN103568987 A, CN102963314 A,

Abstract:
Source: US2016031472A A panel sealing apparatus and a method of assembling the panel sealing apparatus are disclosed. The apparatus includes a panel defining an aperture and a sealing assembly. The sealing assembly includes a first component formed of an elastomeric material and a second component formed of a rigid material. The second component at least partially surrounds the first component and is secured to the first component to form a unit. The sealing assembly further includes a connector configured to be attached to the panel in the aperture separately from the unit. The unit is attached to the connector after placement of the connector in the aperture to couple the unit to the panel.

0) US5589953A – IMAGE INPUT SYSTEM HAVING AN AUTO–FEEDER INCLUD...

197) Family number: 10816454 (US5589953A) © PatBase

Title: Image input system having an auto–feeder including loading magazine and discharge magazine arranged side by side and method

Priority:
JP19940143542 19940624 JP19940144743 19940627 JP19940144894 19940627
JP19940144771 19940627 JP19940144802 19940627 JP19940144868 19940627
JP19940144931 19940627 JP19940146191 19940628 JP19940200000 19940825
JP19940159057 19940712 JP19940165676 19940719 JP19940146202 19940628

Family:

Publication number	Publication date	Application number	Application date
JP3326612 B2	20020924	JP19940144931	19940627
JP3371929 B2	20030127	JP19940200000	19940825
JP3487366 B2	20040119	JP19940144894	19940627
JP8012087 A2	19960116	JP19940144931	19940627
JP8012130 A2	19960116	JP19940144802	19940627
JP8018730 A2	19960119	JP19940144894	19940627
JP8018731 A2	19960119	JP19940146191	19940628
JP8018739 A2	19960119	JP19940143542	19940624
JP8018853 A2	19960119	JP19940144743	19940627
JP8018854 A2	19960119	JP19940144771	19940627
JP8018855 A2	19960119	JP19940144868	19940627
JP8018856 A2	19960119	JP19940146202	19940628
JP8032754 A2	19960202	JP19940159057	19940712
JP8032869 A2	19960202	JP19940165676	19940719
JP8065444 A2	19960308	JP19940200000	19940825
US5589953 A	19961231	US19950427230	19950424
US5754315 A	19980519	US19950423987	19950418

Probable Assignee: NIKON CORP

Assignee(s):(std): FUJINAWA NOBUHIRO ; MAEDA EISAKU ; MATSUI KUMIKO ; MORIMATSU SEIICHI ; TAZAWA MASASHI ; TSUCHIHASHI HIDEHISA ; SUZUKI MAKI ; NIPPON KOGAKU KK

Assignee(s): NIKON CORP

Inventor(s):(std): DOBASHI HIDEHISA ; FUJINAWA NOBUHIRO ; MAEDA EISAKU ; MATSUI KUMIKO ; MATSUTAME KUMIKO ; MORIMATSU SEIICHI ; SUZUKI MAKI ; TAZAWA AKIRA ; TAZAWA MASASHI ; TSUCHIHASHI HIDEHISA

International class (IPC 8–9):
B65G57/30 B65G59/06 B65G60/00 B65H1/26 B65H3/00 B65H3/34 B65H7/04 G03B27/62 G03G15/00 H04N1/00 H04N1/04 H04N1/40 H04N1/401 H04N1/48 H04N5/222 H04N5/253 H04N9/11 (Advanced/Invention);
B65H1/26 B65H3/00 B65H3/34 H04N1/193 H04N9/11 (Advanced/Non–invention);
B65G57/00 B65G59/06 B65G60/00 B65H1/26 B65H3/00 B65H7/04 G03B27/62 G03G15/00 H04N1/00 H04N1/04 H04N1/40 H04N1/401 H04N1/48 H04N5/222 H04N5/253 H04N9/11 (Core/Invention);
B65H1/26 B65H3/00 H04N9/11 (Core/Non–invention)

International class (IPC 1–7):
B65G57/30 B65G59/06 B65G60/00 B65H1/26 B65H3/00 B65H3/34 B65H7/04 G03B27/62 G03G15/00 H04N1/00 H04N1/04 H04N1/401 H04N1/48 H04N5/222 H04N5/253 H04N9/11

CPC:
H04N1/00567 H04N1/00588 H04N1/00594 H04N1/00604 H04N1/00649 H04N1/00681 H04N1/00687 H04N1/00689 H04N1/007 H04N1/00716 H04N1/00737 H04N1/00769 H04N1/00782 H04N1/02865 H04N1/193 H04N2201/0404 H04N2201/0406 H04N2201/0422 H04N9/11

European class:
H04N1/00F H04N1/00F11 H04N1/00F2C H04N1/00F2D2 H04N1/00F2F3 H04N1/00G H04N1/00G2B H04N1/00G2B2 H04N1/00G2B6 H04N1/00G2D4 H04N1/00G3C2 H04N1/00G5C H04N1/00G5E4 H04N1/028E3F T04N1/193 T04N201/04B3 T04N201/04B3B T04N201/04B9 T04N9/11

US class: 353/103 353/113 355/75 358/474 358/487 358/494 358/496 358/498 399/371

Classification Explorer

Cited documents: US5475453 A, US5440362 A, US5387954 A, US5297785 A, US5270841 A, US5233376 A, US5225688 A, US5157504 A, US5132808 A, US5103322 A, US5099321 A, US5089902 A, US5010420 A, US4974959 A, US4864113 A, US4817023 A, US4779113 A, US4756616 A, US4751550 A, US4660957 A, US4645328 A, US4382664 A, US4379627 A, US4368964 A, US4331398 A, US4183651 A, US4114166 A, US3721494 A, US3718392 A, US3645612 A, US3598483 A, JP6245030, JP60015325, JP58167325, JP5303189, JP5142672, JP4106004, EP0530027 A2,

Forward Citations: US8867107, US8817338, US7800393, US7099053, US7021543, US6499848, US5982957, US5892594, US2014139894, US2010148793, US2005259298, US2004223205, US2002176123, JP3731295, JP11017879, GB2359376, EP2536119, EP1475950, EP1176797, EP1176797, EP0804020,

Abstract:
Source: US5589953A An image input system includes an image input device for reading image information from a source document and a feeder for automatically inserting the source documents into the image input device. The feeder includes a loading magazine storing source documents and an adjacent discharge magazine storing source documents discharged from the image input device. The source documents travel along a transport surface within the feeder. A dividing board controls the position of the source documents within the feeder. Detectors are provided to monitor the loading operation. A method of reading image information using the image input system is also disclosed.

198) Family number: 2104008 (DE3113444A1) © PatBase

Title: Single–pole or multi–pole electrical power transmission device, especially for cable drums

Priority: DE19813113444 19810403

Family:

Publication number	Publication date	Application number	Application date
DE3113444 A1	19821014	DE19813113444	19810403
DE3113444 C2	19840503	DE19813113444	19810403

Probable Assignee: EHLEBRACHT GMBH

Assignee(s):(std)**:** EHLEBRACHT GMBH

Assignee(s): EHLEBRACHT GMBH 4904 ENGER DE

Inventor(s):(std)**:** HALEMEIER ECKHARD ING GRAD

Inventor(s): HALEMEIER ECKHARD ING GRAD 4901 HIDDENHAUSEN DE ; HALEMEIER ECKHARD ING

International class (IPC 8–9): H02G11/02 (Advanced/Invention); H02G11/00 (Core/Invention)

International class (IPC 1–7): H01R35/00 H02G1/18

CPC: H02G11/02

European class: H02G11/02

Classification Explorer

Cited documents: DE2943939, DE2748667, DE2236995,

Forward Citations: WO9839829, US6109957, EP0965157, EP0099048, AU733607,

Abstract:
Source: DE3113444A1 The invention is based on the problem of creating a single–pole or multi–pole electrical power transmission device having pairs of sliding contacts which are as simple to produce as possible. The single–pole or multi–pole electrical power transmission device, especially for use on a cable drum, has at least one pair of sliding contacts (23, 21 and 28, 27 respectively). Each pair of contact discs (23, 21 and 28, 27 respectively) has a first contact disc (23, 28) which is closed in the form of an annulus and is flat even in the axially unloaded state. Each pair of contact discs (23, 21 and 28, 27 respectively) also includes a second contact disc (21, 27), which is likewise closed in the form of an annulus and has a projection which extends over a circumferential angle range (alpha) and over the entire radial width (b) of the circular ring disc (21, 27) continuously, in the form of a bulge (24, 32). The bulge (24, 32) can spring in parallel (in the x direction) to the rotation axis of each pair of contact discs (23, 21 and 28, 27 respectively).

199) Family number: 23081891 (GB1106972A) © PatBase

Title: Improvements in or relating to character recognition systems

Priority: GB19640004084 19640130

Family:

Publication number	Publication date	Application number	Application date
GB1106972 A	19680320	GB19640004084	19640130

Probable Assignee: MULLARD LTD

Assignee(s):(std)**:** MULLARD LTD

Assignee(s): MULLARD LIMITED

Inventor(s):(std)**:** WEAVER JOHN ANTHONY ; WOOLLONS DAVID JOHN

International class (IPC 8–9)**:** G06K9/80 (Advanced/Invention); G06K9/80 (Core/Invention)

International class (IPC 1–7)**:** G06K9/16

CPC: G06K9/80

European class: G06K9/80

Classification Explorer

Forward Citations: US4628532, GB2217496, GB2217496, GB2144251, GB2136995, FR2549259,

Abstract:
Source: GB1106972A 1,106,972. Automatic character reading. MULLARD Ltd. 23 April, 1965 [30 Jan., 1964], No. 4084/64. Heading G4R. Character reading apparatus comprises means for exploring a character, means for detecting ends and loops as features of the character and means for forming a coded word representing a list of character features including all ends and loops detected together with their positions in the character. An end is the end of a line (excluding serifs) where the outer edge of the character, which is followed by a scanning arrangement, changes direction by 180 degrees in a short distance. A loop is a part having an inner edge forming a closed path enclosed within the outer edge of the character. In the form described, curves and junctions of lines are also detected and included in the feature list. The character is scanned by a flying spot scanner and the results are punched on paper tape. The data from the tape is entered into a computer as shown diagrammatically in Fig. 2. The characters sensed are reconstituted as binary patterns in the matrix store of the computer. A character may occupy 63 x 63 positions. The character signals are then subject to a noise reduction programme which in effect looks at each sub–matrix of 3 x 3 positions and designates the centre position " 1 " or " 0 " according to predetermined rules. Three possible programmes are described for doing this, one being described in Specification 1,106,974. The resulting character patterns are stored in matrix 1 in which it thus subjected to an outline tracing process. This is programmed to fill gaps in lines and to extract certain sub–features: loops, curves, angles and ends of lines. The programme begins by scanning through matrix 1 until it finds a large area of black. It then traces round the outside edge of this area detecting sub–features on the way. When it comes across a line end it goes into the gap–filling routine, Fig. 14 (not shown), to see if it is a genuine line end or merely a gap. In the latter case it is bridged and the trace continues beyond the gap and black points are inserted in matrix 1 to fill the gap. In the former case the attempt to bridge the gap is abandoned and tracing begins again from the point it had reached, until it returns to the original position. The path actually followed by the trace is entered as a pattern of dots in matrix 2 and coded representations of any subfeatures found are also entered in matrix 2. If a gap was filled matrix 2 is cleared and the process is repeated on the filled pattern of matrix 1. The tracing procedure progress round the edge of a character by jumping to an adjacent point in one of eight directions (Fig. 12, not shown). The programme is guided by a " permanent " direction signal which attempts to move the trace in one of these directions. This is the direction of the last successful jump. If the trace having jumped in the same direction again finds no black point, the other directions are tried in a predetermined sequence until a black point is found. This then becomes the new " permanent " direction. After each successful jump the point to which the jump has been made is entered in matrix 2 so that eventually the outline of the character is stored. Also a count is kept of the X and Y excursions and the total number of jumps required to go round the character. The character is rejected if this exceeds a preset maximum. Also a record is kept of the successive directions averaged over a number of jumps. This is called the " trend " direction. The size of the character in matrix 2 is compared with the size of another character (the largest to date) which is stored in matrix 3. If the matrix 2 character is larger, it and the sub–feature list are put in matrix 3 and the character from matrix 3 is put in matrix 4. If the matrix 3 character is larger then the character in matrix 2 goes to matrix 4, the sub–features being discarded. Matrix 2 is then cleared. This process is repeated for all the characters in matrix 1 and at the end of the process the outline of the largest character is in matrix 3 and the outside edges of all the smaller characters will be in matrix 4. If the largest character in matrix 3 is not sufficiently large it is rejected. Matrix 1 is then scanned again looking for the inside contours and these patterns are passed from matrix 2 of matrix 5 (which stores only the largest).

Sub−features.−The test for line ends is that the trend direction reverses in a small number of jumps. Angles are indicated when more than a certain change of trend direction occurs within a given number of jumps. At the end of the trace any angles which have also been indicated as ends are rejected. The remaining angles with their X and Y positions are entered in the sub−feature list. For a curve to be indicated the line must be more than a certain length, that is, it must involve more than a given number of jumps. There must be a sufficient change in trend direction and the direction of change of trend must be constant. A curve can end in a line−end, an angle or a curve of opposite direction (as in " S "). Matrix 5 contains the inside contour, if any, of the largest character, i.e. the character of which the outside profile in matrix 3. If there is a pattern in matrix 5, a loop is indicated since a loop is defined as a closed edge totally enclosed within another closed edge. Sorting and testing sub−features.−In the next block functions are detected from the presence of more than one angle in a similar position. Serifs are suppressed in certain cases, and inner and outer curve indications are condensed to a single curve feature. The output is a list of features with the X, Y co−ordinates of their positions. Coding.−This list of features and positions is then coded as described in Specification 1,106,973. The list is first rearranged in clockwise order of occurrence. After coding, the features represent the description of the character in the form of a binary word. The list may be repeatedly recycled, the first item being placed last and so on. This corresponds to an orientation of the original character. The character may be recognized by a switching network controlled by these features or the feature list may be compared with lists for all characters in a dictionary store. Learning.−For the purpose of filling the dictionary store initially the character signals entered on the tape may have a label identifying the character. This identification is added to the features in the coder and entered in the dictionary. A comparison takes place with all the stored lists in turn and the coded list is entered as a new word only if it is not already there. The process is similar for recognition, the coded list is compared with the stored lists and agreement identifies the character.

0) DE102015116439A1 – MONTAGESATZ ZUM AUFNEHMEN EINER SCHEIBE UND INS...

200) Family number: 62058848 (DE102015116439A1) © PatBase

Title: MONTAGESATZ ZUM AUFNEHMEN EINER SCHEIBE UND INSTALLATION MIT EINER MONTIERTEN SCHEIBE

Priority: CH20140001510 20141005

Family:

Publication number	Publication date	Application number	Application date
AT516332 A2	20160415	AT20150000644	20151001
AT516332 A3	20161115	AT20150000644	20151001
CH710207 A2	20160415	CH20140001510	20141005
DE102015116439 A1	20160407	DE201510116439	20150929
FR3026626 A1	20160408	FR20150059469	20151005

Probable Assignee: RIVAPLAN AG

Assignee(s):(std)**:** RIVAPLAN AG

Inventor(s):(std)**:** HANS SCHACHER ; SCHACHER HANS

Agent(s): CABINET NUSS

International class(IPC 8–9)**:** A47K3/28 A47K3/30 E04B2/82 E04F15/00 E05D5/02 (Advanced/Invention); A47K3/00 (Advanced/Non–invention)

CPC: A47K3/30 A47K2003/305 A47K2003/307

Classification Explorer

Abstract:
Source: DE102015116439A1 Die Erfindung betrifft eine Nassraum–Installation mit einer Platte oder Scheibe (30), die in einem Boden und/oder in einer Wand befestigt ist, wobei die Nassraum–Installation im Bereich des Bodens und/oder der Wand eine Schiene (1) umfasst, die aus einem ersten Profil (1.1) und einem zweiten Profil (1.2) zusammengesetzt ist. Es kommen Befestigungsmittel (5) zum Einsatz, um das zweite Profil (1.2) mit dem ersten Profil (1.1) verbinden. Die Schiene (1) weist zwischen einem Teil des ersten Profils (1.1) und einem Teil des zweiten Profils (1.2) eine Laengstasche (2) auf, in der eine Kante der Platte oder Scheibe (30) sitzt.

0) US2016122169A – CENTERING BELL QUICK CHANGE SYSTEM

201) Family number: 62233007 (US2016122169A) © PatBase

Title:	CENTERING BELL QUICK CHANGE SYSTEM
Priority:	US20140073333P 20141031 US20150923528 20151027

Family:

Publication number	Publication date	Application number	Application date
US2016122169 AA	20160505	US20150923528	20151027

Probable Assignee:	SAMAROO RISHIERAM
Assignee(s):(std)**:**	SAMAROO RISHIERAM ; SWEENY KEVIN
Inventor(s):(std)**:**	SAMAROO RISHIERAM ; SWEENY KEVIN
International class (IPC 8–9)**:**	B67C3/00 B67C3/22 B67C3/26 (Advanced/Invention)
CPC:	B67C3/26 B67C3/225 B67C3/002 B67C2003/2657 B67C2003/2668 B67C2003/266
US class:	141/129 141/91

Classification Explorer

Abstract:
Source: US2016122169A An adapter system for a beverage can filling valve for quick connection/disconnection of multiple centering bells used to fill differently sized cans and a CIF assembly.

0) US5921588A – PUSH–IN PIPE COUPLING

202) Family number: 30536397 (US5921588A) © PatBase

Title: PUSH–IN PIPE COUPLING

Priority: DE19961012320 19960328 DE19961025687 19960627 DE19971036765 19970823

Family:

Publication number	Publication date	Application number	Application date
CN1182851 A	19980527	CN19971013845	19970627
CN1209518 A	19990303	CN19981018617	19980821
DE19625687 A1	19970507	DE19961025687	19960627
DE19625687 C2	19991216	DE19961025687	19960627
DE19736765 A1	19990225	DE19971036765	19970823
EP0816741 A2	19980107	EP19970109612	19970613
EP0816741 A3	19991027	EP19970109612	19970613
EP0899498 A2	19990303	EP19980114268	19980730
EP0899498 A3	20010228	EP19980114268	19980730
IL125370 A0	19990312	IL19980125370	19980715
JP11125372 A2	19990511	JP19980234730	19980820
RU98115912 A	20000620	RU19980115912	19980821
US5921588 A	19990713	US19970884671	19970627

Probable Assignee: FRIATEC AG

Assignee(s):(std)**:** FRIATEC AG ; IMZ FERTIGUNG VERTRIEB ; FRIATEC KERAMIK KUNSTSTOFF ; IMZ FERTIGUNGS U VERTRIEBSGESELLSCHAFT

Assignee(s): IMZ FERTIGUNGS UND VERTRIEBSGESELLSCHAFT ; FRIATEC AKTIENGESELLSCHAFT KERAMIK UND KUNSTSTOFFWERKE ; FRIATEC KERAMIK U KUNSTSTOFFWERKE AG ; FRIATEC AG 68229 MANNHEIM DE ; FRIATEC AG KERAMIK UND KUNSTSTOFFWERKE ; FRIATEC AG KERAMIK UND KUNSTSTOFFWERKE 68229 MANNH ; FRIATEC AG KERAMIK UND KUNSTSTOFFWERKE 68229 MANNHEIM DE ; FRIATEC AKTIENGESELLSCHAFT ; FRIATEC AKTIENGESELLSCHAFT KERAMIK UND KUNSTSTOFFW ; FRIATEC 68229 MANNHEIM DE AG

Inventor(s):(std)**:** R SCHULE ; R WOGER ; SCHICHILE W ; SCHOLL REINHOLD ; SCHULE R ; SICHLER WOLFGANG ; VOGEL ROLF ; W SCHICHILE ; WOGER R ; WOLFGANG SICHLER

Inventor(s): VOGEL ROLF 69198 SCHRIESHEIM DE ; SICHLER WOLFGANG 68239 MANNHEIM DE ; SCHOLL REINHOLD 68309 MANNHEIM DE

Designated states: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

International class (IPC 8–9): F16L19/065 F16L19/08 F16L21/02 F16L37/092 F16L47/04 (Advanced/Invention); F16L19/00 F16L21/02 F16L37/00 F16L47/00 (Core/Invention)

International class (IPC 1–7): F16L F16L21/00 F16L21/02 F16L21/08 F16L33/22 F16L37/084 F16L37/092 F16L37/16 F16L55/00

CPC: Y10S285/906 F16L19/075 F16L37/092 F16L19/065 F16L19/086 F16L37/0925 F16L47/04 F16L2201/10

European class: F16L19/065 F16L19/08C2 F16L37/092 F16L37/092B F16L47/04 R16L201/10

US class: 285/23 285/322 285/906 285/93

Classification Explorer

Cited documents: US887864 A, US5593186 A, US5046763 A, US4406485 A, US4364587 A, US4138145 A, US4067537 A, US4067534 A, US3815940 A, US3743326 A, GB2174468 A1, GB2165604 A1, GB1156744 A, FR1071751 A, EP0587131 A1, DE9308181 U, DE9308181, DE4304241 A1, DE3112255 A1, DE19625687 A1, DE1907474 A1, CH406756 A,

Forward Citations: WO14163480, WO14079882, WO13166666, WO11090856, WO08104562, WO08104561, WO08104561, WO06018449, WO0216817, WO0155631, US9611961, US9611958, US9562635, US9297481, US9033372, US8876170, US8833733, US8523245,

US8439407, US7980600, US7762279, US7575024, US6773039, US6505860, US6089620, US2011175348, US2009267345, US2009263186, US2009051166, US2008290660, US2004155464, KR200452666, KR100784929, JP6018936, JP5898850, JP2014145397, JP2012072895, GB2513633, GB2476394, GB2476394, FR2998349, FR2804196, EP2472156, EP2472155, EP2217843, EP2157351, EP2128508, EP2126441, EP1326522, EP0945662, EP0940617, EP0940616, EP0899498, DE19935246, DE19935246, DE19917396, DE19809290, DE10238549, DE102006056663, DE102006056663, DE10161372, CZ302344, CZ297056, CN105333262, CN104373724, CN104373724, CN102713113, CN102713113, CN102192373, CN102062273,

Abstract:
Source: US5921588A A push−in coupling for pipes contains a sleeve body (2) and a holding means, especially with a clamping body (6), for connecting a pipe end (3, 4) to the sleeve body (2). This push−in coupling permits proper handling with little effort during assembly, and insofar as possible prevents the danger of faulty assembly. A sliding body (50) is disposed within the sleeve body (2), the sliding body (50) being made independently of the holding means. The sliding body (50) contains a striker (52) which upon insertion of the pipe end (3, 4) is pushed over an edge (60), and upon reaching a given depth of insertion of the pipe end (3, 4) strikes against a surface (62) producing a detectable signal such as an acoustical signal and/or a vibration signal.

0) DE202015008787U1 – PLATTENLAGER UND DAS PLATTENLAGER VERWENDENDER ...

203) Family number: 62000706 (DE202015008787U1) © PatBase

Title: PLATTENLAGER UND DAS PLATTENLAGER VERWENDENDER PLATTENBODEN

Priority: NL20142014072 20141230 NL20152014465 20150316

Family:

Publication number	Publication date	Application number	Application date
DE202015008787 U1	20160331	DE201520008787U	20151223
NL2014465 A1	20160922	NL20152014465	20150316
NL2014465 B1	20160930	NL20152014465	20150316

Probable Assignee: CASALINI BV

Assignee(s):(std)**:** CASALINI BV

Inventor(s):(std)**:** RICHARDUS WILHELMUS THEODORUS MARIA MAASSEN

International class (IPC 8–9): E04F15/02 E04F15/024 (Advanced/Invention)

CPC: E04F15/0247 E04F15/02452 E04F15/02494

Classification Explorer

Cited documents: WO14160076 A1, US4558544 A, EP2381046 A1,

Abstract:
Source: DE202015008787U1 Plattenlager zum Positionieren und Abstuetzen eines Plattenbodens auf einer primaeren Gebaeudeoberflaeche, wobei das Plattenlager eine untere Plattenlageroberflaeche, die dazu angepasst ist, zu einer Gebaeudeoberflaeche hin zu zeigen, und eine obere Plattenlageroberflaeche aufweist, die von der unteren Oberflaeche durch einen Koerper aus Material beabstandet ist, aus dem das Plattenlager ausgebildet ist, wobei die obere Plattenlageroberflaeche mehrere radial angeordnete Fortsaetze aufweist, die sich von der oberen Plattenlageroberflaeche in einer Richtung senkrecht zu dieser erstrecken, wobei jeder Fortsatz dazu angepasst ist, mit einer Ausnehmung an einem Boden eines Plattenrands in Eingriff zu kommen, und wobei ein sich radial erstreckender Schlitz zwischen jedem nebeneinanderliegenden Paar von Fortsaetzen vorgesehen ist, um es einer Ausrichtungslasche eines Sockels zu gestatten, sich durch ihn hindurch zu erstrecken.

0) NO337665B – ANORDNING FOR OPPTREKKING OG UTSETTING AV NOT

204) Family number: 63562800 (NO337665B) © PatBase

Title: ANORDNING FOR OPPTREKKING OG UTSETTING AV NOT

Priority: NO20140001336 20141110

Family:

Publication number	Publication date	Application number	Application date
NO20141336 A	20160511	NO20140001336	20141110
NO337665 B1	20160530	NO20140001336	20141110

Probable Assignee: HIDLE HANS OLE

Assignee(s):(std)**:** HIDLE HANS OLE

Inventor(s):(std)**:** HIDLE HANS OLE

International class (IPC 8–9): A01K73/00 A01K73/06 A01K75/00 (Advanced/Invention)

Classification Explorer

Abstract:
Source: NO337665B Anordning (1) for opptrekk og/eller utsett av not, notlin, notposer og lignende. Anordningen omfatter en ytre trommel (8) med et antall gjennomgaende hull (10) i radial retning, en indre sylinder (12) som ligger inne i den ytre trommelen (8), idet en aksial senterakse for den indre sylinderen er parallellforskjoevet med en aksial senterakse for den ytre trommelen. Videre omfatter anordningen et antall tapper (11) som er anordnet mellom den ytre trommelen (8) og den indre sylinderen (12), idet hver tapp (11) ligger an mot kanten av et av hullene (10) i den ytre trommelen (8) og en ende av hver tapp ligger an mot en ytre overflate av den indre sylinderen (12).

0) DE29918310U1 – RING SENSOR ROTOR RING–DUESEN–ROTOR

205) Family number: 17005376 (DE29918310U1) © PatBase

Title: Ring sensor rotor

Priority: DE19992018310U 19991016

Family:

Publication number	Publication date	Application number	Application date
DE29918310 U1	20000302	DE19992018310U	19991016

Probable Assignee: BERNER FRIEDRICH

Assignee(s):(std)**:** BERNER FRIEDRICH

International class (IPC 8–9): B64C27/22 B64C29/00 B64C39/06 (Advanced/Invention); B64C27/00 B64C29/00 B64C39/00 (Core/Invention)

International class (IPC 1–7): B64C27/22

CPC: B64C27/22 B64C29/00 B64C39/062

European class: B64C27/22 B64C29/00 B64C39/06B

Classification Explorer

Abstract:
Source: DE29918310U1 (Claim 1) 1. Ring–Duesen–Rotor als Vorrichtung zur Erzeugung von Schubkraeften und Stroemungen, beispielsweise zum Antrieb von Luft– oder Wasserfahrzeugen, dadurch gekennzeichnet, dass ein Rotorlaeufer, der sich um eine Achse dreht, aus einer Vielzahl von gekruemmten Kanaelen besteht (3) die im Zentrum als Duese (6) eine Oeffnung nach oben und am Aussendurchmesser eine Oeffnung nach unten als Duese (7) haben, deren Flaechenquerschnitt formmaessig verschieden, aber groessenmaessig durchgehend gleich bzw. annaehernd gleich oder unterschiedlich gross ist.

Machine translation: (Claim 1) 1. Ring sensor rotor as device for the production of thrusts and currents, for example to the drive of air or vessels, thereby characterized that a rotor runner, which turns around an axle consists in the center as nozzle (6) the opening of a multiplicity of curved channels (3) upward and at the outside diameter an opening downward as nozzle (7) has, their surface cross section form–moderately differently, but continuous in order of size directly and/or approximately directly or of various sizes is.

0) FR1324581A – DISPOSITIF POUR FIXER DE MANIERE AMOVIBLE DES P...

206) Family number: 23036198 (FR1324581A) © PatBase

Title: DISPOSITIF POUR FIXER DE MANIERE AMOVIBLE DES PLAQUES DE COUVERTURE EN PARTICULIER POUR TOITURES OU ANALOGUES SUR UNE CHARPENTE
DEVICE FOR DETACHABLE MANNER SET COVER PLATE IN PARTICULAR ROOF OR SIMILAR TO A FRAME (Machine translation)

Priority: FR19620898602 19620524

Family:

Publication number	Publication date	Application number	Application date
FR1324581 A	19630419	FR19620898602	19620524

Inventor(s):(std): BROGLIA PAOLO

International class (IPC 8–9): E04D3/362 E04D3/365 (Advanced/Invention); E04D3/36 (Core/Invention)

International class (IPC 1–7): E04D3/362 E04D3/365

CPC: E04D3/365 E04D3/362

European class: E04D3/362 E04D3/365

Classification Explorer

Abstract:
Source: FR1324581A (Claim 1) 1. Un dispositif destine a fixer des plaques de couverture d'une facon amovible sur la charpente dispositif comprenant une petite traverse pouvant cooperer par ses extremites avec les bords coplanaires de deux plaques contigues et des organes d'ancrage assembles avec ladite petite traverse et susceptibles de cooperer avec la charpente.

Machine translation: (Claim 1) 1. A device intended to fix the cover plates of a removable manner on the frame comprising a small device that can cooperate through its extremities coplanar with the edges of two contiguous plates and anchor members assembled with said small crosses and likely to cooperate with the frame.

0) WO12084875A1 – BEVERAGE CAN CONTAINING A SOUND GENERATOR GETR...

207) Family number: 51341563 (WO12084875A1) © PatBase

Title: BEVERAGE CAN CONTAINING A SOUND GENERATOR

Priority: AT20100002103 20101221 EP20110799693 20111220 WO2011EP73309 20111220

Family:

Publication number	Publication date	Application number	Application date
DE502011006622 D1	20150521	DE201150006622T	20111220
EP2655216 A1	20131030	EP20110799693	20111220
EP2655216 B1	20150415	EP20110799693	20111220
WO12084875 A1	20120628	WO2011EP73309	20111220

Probable Assignee: HOEFLINGER ANDREAS

Assignee(s):(std)**:** HOEFLINGER ANDREAS

Inventor(s):(std)**:** HOEFLINGER ANDREAS

Agent(s): PUCHBERGER BERGER AND PARTNER; GRABHERR CLAUDIA; GRABHERR CLAUDIA ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B65D17/34 B65D81/36 G10K5/00 (Advanced/Invention)

CPC: B65D17/165 B65D81/36 B65D2517/0014 B65D2517/0056 G10K5/00

European class: B65D17/16B2 B65D81/36 G10K5/00 L65D517/00Y2C L65D517/00Y6Z

Classification Explorer

Cited documents: US1852934 A,

DE202005012629 U1

Abstract:
The invention relates to a musical instrument made of a beverage can comprising an opener (1), which is riveted to the upper top surface (2) of the can (3) and by means of which, by lifting one of the ends (4) thereof, the can (3) can be opened via a pivoting movement of the opener (1) about an axis transversely to the longitudinal axis of the rivet in that the other end (6) pushes a predetermined section (7) of the top surface (2) out of the top surface (2) and bends said section into the can (3), wherein the opener (1) comprises a sound generator (8). According to the invention, the opener (1) comprising the sound generator (8) projects into the cavity of the can (3) when the can (3) is open so as to influence the sound generation. In order to produce the sound generator, preferably a single flat blank is stamped from a sheet–like material, said blank comprising a section each for a lower wall (9), for an intermediate wall (16), for an upper wall (10), for lateral walls (11 a, 11 b), and for connecting walls (17a, 17b), and said blank being bent and folded corresponding to the sections.

0) EP3098097A1 – ANHAENGEKUPPLUNG TRAILER COUPLING ATTELAGE

208) Family number: 64147294 (EP3098097A1) © PatBase

Title: ANHAENGEKUPPLUNG TRAILER COUPLING

Priority: DE201510108574 20150529 DE201610109379 20160520

Family:

Publication number	Publication date	Application number	Application date
DE102016109939 A1	20161201	DE201610109939	20160530
EP3098097 A1	20161130	EP20160172055	20160530

Probable Assignee: WESTFALIA AUTOMOTIVE GMBH

Assignee(s):(std)**:** WESTFALIA AUTOMOTIVE GMBH

Inventor(s):(std)**:** HETFLEISCH RAIMUND

Agent(s): PATENTANWAELTE BREGENZER U REULE PARTNERSCHAFTSGESELLSCHAFT MBB

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

International class (IPC 8–9): B60D1/06 B60D1/54 (Advanced/Invention)

CPC: B60D1/54 B60D1/06

Classification Explorer

Cited documents: EP2829422 A2, EP2650149 A1,

DE102013007114 A1

Abstract:
Source: EP3098097A1 Die Erfindung betrifft eine Anhaengekupplung fuer ein Kraftfahrzeug (200) mit einem Kupplungsarm (20; 320), wobei der Kupplungsarm (20; 320) an einem am Kraftfahrzeug (200) befestigten oder befestigbaren Halter (11) (11) anhand eines Lagers, insbesondere eines Schwenklagers (16), zwischen einer Gebrauchsstellung (G) und einer Nichtgebrauchsstellung (N) beweglich, insbesondere schwenkbar, bezueglich mindestens einer Lagerachse gelagert ist, wobei der Kupplungsarm (20; 320) in der Gebrauchsstellung (G) zum Anhaengen eines Anhaengers oder Befestigen eines Lastentraegers weiter nach hinten vor ein Heck (202) des Kraftfahrzeugs (200) vorsteht als in der fuer einen Nichtgebrauch des Kupplungsarms (20; 320) vorgesehenen Nichtgebrauchsstellung (N), wobei das Lager eine am Halter (11) angeordnete Halterlageraufnahme (104) und ein den Kupplungsarm (20; 320) tragendes Kupplungsarmlagerelement (40; 340) aufweist, das an der Halterlageraufnahme (104) beweglich gelagert ist, wobei die Anhaengekupplung (310) eine Fixiereinrichtung (160) zum ortsfesten Fixieren des Kupplungsarms am Halter (11) in der Gebrauchsstellung (G) und/oder der Nichtgebrauchsstellung (N) aufweist. Es ist vorgesehen, dass eine Lagerkomponente des Lagers mit mindestens einem Bauteil (183, 383, 483), insbesondere einer zweiten Lagerkomponente (182, 382, 482) des Lagers oder dem Kupplungsarm (20; 320) oder einem Bauteil der Fixiereinrichtung (160), anhand einer Rastanordnung (181, 381, 481) verbunden ist. The invention relates to a towbar for a motor vehicle (200) with a clutch arm (20; 320), where the clutch arm (20; 320) to a mounted on the vehicle (200) or befestigbaren holder (11) (11) on the basis of a bearing, in particular a swivel bearing (16) between a use position (G) and a non−use position (N) portable, swiveling in particular, is stored with regard to at least one bearing axis, where the clutch arm (20, 320) in the use position (G) to attach a trailer or fasten a load carrier further backwards before a stern (202) of the motor vehicle () 200) is as in the non use position provided for a non−use of the clutch arm (20; 320) (N), where the camp is a holder (11) arranged bearing clamps (104) and the clutch arm (20; 320) bearing clutch arm bearing element (40; 340) has, on the bearing clamps (104) is movable bearings, where the towbar (310) has a fixing unit (160) to fixed fix of the clutch arm on the holder (11) in the use position (G) or the non−use position (N). It is provided that it is connected to a storage component of the camp with at least one component (183, 383, 483), in particular a second bearing component (182, 382, 482) of the bearing or the clutch arm (20; 320) or a component of the fixing device (160), based on a locking arrangement (181, 381, 481).

0) DE8209701U1 – HALTEVORRICHTUNG FUER ALS HANDGERAETE AUSGEBILD...

209) Family number: 17732492 (DE8209701U1) © PatBase

Title: HALTEVORRICHTUNG FUER ALS HANDGERAETE AUSGEBILDETE MASSAGEGERAETE

Priority: DE19820009701U 19820403

Family:

Publication number	Publication date	Application number	Application date
AT393078 B	19910812	AT19830000846	19830310
AT84683 A	19910115	AT19830000846	19830310
DE8209701 U1	19820805	DE19820009701U	19820403

Probable Assignee: FESTO MASCHF STOLL G

Assignee(s):(std)**:** FESTO MASCHF STOLL G

Assignee(s): FESTO MASCHINENFABRIK GOTTLIEB STOLL ; FESTO MASCHINENFABRIK GOTTLIEB STOLL 7300 ESSLINGE ; FESTO MASCHINENFABRIK GOTTLIEB STOLL 7300 ESSLINGEN DE

International class (IPC 8–9): A61H23/00 A61H23/02 (Advanced/Invention)

International class (IPC 1–7): A61H23/00 A61H23/02

Classification Explorer

Cited documents: US3364921 A, DE1616172 A1, AT331383 B,

Abstract:
Source: AT393078B [Source: Claim 1] 1. Haltevorrichtung fuer als Handgeraete ausgebildete, eine vibratorische Arbeitsbewegung ausfuehrende Massageplatte besitzende Massagegeraete, mit einer ?. B. an einer Tischplatte od» an ein» Wand befestigbaren Tragsaeule, an der ein Halt» fuer das Massagegeraet angeordnet ist der einen an der Tragsaeule laengsverschieblich gefuehrten und in der jeweiligen Laengslage feststellbaren Befestigungsteil, sowie einen Halteteil umfasst der um eine rechtwinklig zur Tragsaeule verlaufende Schwenkachse verschwenkbar am Befestigungsteil sitzt, in der jeweiligen Schwenklage feststellbar ist und eine im wesentlichen parallel zur Tragsaeule verlaufende, je nach d» Schwenklage gegen diese geneigte Halteoeffnung zum Einsetzen des Massagegeraetes besitzt, dadurch gekennzeichnet, dass die Halteoeffnung (13) im Betriebszustand ueber den Umfang geschlossen ist und –5– 5 10 15 20 25 30 35 40 45 50 55 60 AT 393 078 B zwischen zwei Halteannen (14, 15) des Halteteiles (10) enthalten ist, die an einander gegenueberliegenden Seiten der Halteoeffnung (13) angeordnet sind und von denen der erste Haltearm (14) um die zur Tragsaeule rechtwinklige Schwenkachse (11) verschwenkbar sowie in der jeweiligen Schwenklage feststellbar am Befestigungsteil (9) gelagert ist und der zweite Haltearm (15) am ersten Haltearm (14) an einem Ende um eine rechtwinklig zur Schwenkachse (11) und parallel zur Halteoeffnung (13) verlaufende Scharnierachse (16) angelenkt und an seinem anderen Ende am ersten Haltearm (14) loesbar befestigbar ist, wobei das Befestigungsende (18) der Haltearme (14,15) dem Befestigungsteil (9) zugewendet und das Scharnierende (17) dem Befestigungsteil (9) abgewendet ist, und dass zum Feststellen des Befestigungsteils (9) an der Tragsaeule (5) gesonderte Klemmittel am Befestigungsteil angeordnet sind. [Source: claim 1] 1 fixture for trained as handheld devices, performing an on labour movement owns massage plate Massager with a?. ««««A tabletop like od» on a» wall's befestigbaren column, the stop» which is arranged for the massage device running a longitudinal halfen listed on the support column and in the respective longitudinal position locking fastener, and includes running at right angles to the column swivel axis reverse swivel bar to the fixing part sits a locking element, is detectable in the respective position of the swivel and one essentially parallel to the support column «, according to d» swivel position against this inclined retaining opening to insert the Massager has, characterised in that the holding opening (13) in the operational state of the scope is closed and 5 – 5 10 15 20 25 30 35 40 45 50 55 60 AT 393 078 (B) between two Halteannen (14, 15) of the holding unit (10) is included, the opposite to each other sides of the mounting opening (13) are arranged, and of which the first retaining arm (14) to the right angle in relation to the support column Swivel axle (11) reverse swing bar and stored in the respective position of the swivel is fixable on the fastener (9) and the second support arm (15) on the first mount (14) is hinged and removable befestigbar at its other end to the first mount (14) at one end to a running at right angles to the swivel axis (11) and parallel to the mounting opening (13) hinge axis (16), while the fastening end (18) the support arm (14,15) the fixation part (9) applies to and averted the hinge end (17) the fixation part (9) is, and that (9) to support column (5) separate clamping on the fastener are arranged to determine the mounting part.

0) EP0085935A2 – TRAVELLING PLUG. REISESTECKER. FICHE POUR VOY...

210) Family number: 3100141 (EP0085935A2) © PatBase

Title: Travelling plug.

Priority: DE19823203809 19820204 DE19833376605 19830202 EP19830100966 19830202

Family:

Publication number	Publication date	Application number	Application date
AT34253 E	19880515	AT19830100966T	19830202
DE3203809 A1	19830811	DE19823203809	19820204
DE3376605 D1	19880616	DE19833376605	19830202
EP0085935 A2	19830817	EP19830100966	19830202
EP0085935 A3	19850515	EP19830100966	19830202
EP0085935 B1	19880511	EP19830100966	19830202

Probable Assignee: NAPIERSKI REINHARD

Assignee(s):(std)**:** NAPIERSKI REINHARD

Inventor(s):(std)**:** NAPIERSKI REINHARD

Designated states: AT CH DE FR GB IT LI

International class (IPC 8–9)**:** H01R27/00 (Advanced/Invention); H01R27/00 (Core/Invention)

International class (IPC 1–7)**:** H01R27/00 H01R27/02 H01R31/06

CPC: H01R27/00

European class: H01R27/00

Classification Explorer

Cited documents: US2989719 A, GB622565 A, FR1242986 A, EP0033723 A2, DE7807806 U,

Forward Citations: WO9314540, WO8600762, US6371815, US5295845, US4586777, KR100767148, FR2674379, EP0505256, EP0502685, EP0477636, DE19542936,

Abstract:
1. A travelling plug with contact pins (14, 28, 38, 48, 64) for electrical socket outlets with different contact spacings, which contact pins are adjustable in guides (16, 22, 30, 66, 76) in a housing, characterized in that the contact pins (14, 28, 38, 48, 64) are electrically connected and are held by frictional contact in position in the guides by means of contact springs (26, 42, 46, 48) which exert an axial and/or radial load on the rear end of the contact pins.

0) DE2239906A1 – ANBOHRVENTIL CONNECTION PIECE (MACHINE TRANSL...

211) Family number: 18103880 (DE2239906A1) © PatBase

Title: ANBOHRVENTIL Connection piece (Machine translation)

Priority: DE19722239906 19720814

Family:

Publication number	Publication date	Application number	Application date
DE2239906 A1	19740228	DE19722239906	19720814

Probable Assignee: RHEINISCHES METALLWERK GMBH

Assignee(s):(std)**:** RHEINISCHES METALLWERK GMBH

Assignee(s): RHEINISCHES METALLWERK GMBH ARMATURENFABRIK METALL ; RHEINISCHES METALLWERK GMBH ARMATURENFABRIK METALL UND EISENGIESSEREI 5050 PORZ

Inventor(s):(std)**:** KNOTT THEO ; SCHOENWALD HELMUT

Inventor(s): SCHOENWALD HELMUT 5050 PORZ

International class (IPC 8–9): F16L47/34 (Advanced/Invention); F16L47/00 (Core/Invention)

International class (IPC 1–7): F16L41/04

CPC: F16L47/345

European class: F16L47/34B

Classification Explorer

Forward Citations: EP0179258,

Abstract:
Source: DE2239906A1 (Claim1) Patentanspruech e========== W Anbohrventil fuer aus Kunststoffrohren bestehenden Leitungen, bei dem die mittels eines Gewindes im Gehause gefuehrte Spindel ein FrGs– oder Bohrwerkzeug traegt, dadurch gekennzeichnet, dass zwei in Laengsrichtung der Spindel (13) hintereinander befind liche d Gewinde (20, 21; 23, 24) unterschiedlicher Ganghoehe vor gesehen sind, ueber die Spindel (13) und Gehause (11) im Eingriff miteinander stehen.

Machine translation: (Claim1) claims e ========== W piece for the existing plastic piping lines, in which the means of a thread Housing guided spindle FRGS or drilling tool wears, characterized in that two in Laengsrichtung the spindle (13) in a row are use D thread (20, 21, 23, 24) are different pitches seen, over the spindle (13) and housing (11) are in engagement with each other.

0) DE1515385A1 – KABELBAHN FUER DIE HAUPTZULEITUNGEN EINER ELEKT...

212) Family number: 30950949 (DE1515385A1) © PatBase

Title: KABELBAHN FUER DIE HAUPTZULEITUNGEN EINER ELEKTRISCHEN INSTALLATION CABLEWAY FOR KEY SUPPLIES AN ELECTRICAL INSTALLATION (Machine translation)

Priority: DE1962A040093 19620428

Family:

Publication number	Publication date	Application number	Application date
CH402098 A	19651115	CH19630004266	19630403
DE1515385 A1	19690626	DE19621515385	19620428

Probable Assignee: WILDEN ELEKTRO BAU

Assignee(s):(std)**:** ALLGEMEINER ELEKTROBAU HERMANN ; WILDEN ELEKTRO BAU

Assignee(s): ALLGEMEINER ELEKTRO BAU HERMANN WILDEN ; ALLGEMEINER ELEKTROBAU HERMANN WILDEN ING

Inventor(s):(std)**:** HERMANN WILDEN ; WILDEN HERMANN

International class(IPC 8–9)**:** H02G3/04 (Advanced/Invention); H02G3/04 (Core/Invention)

International class(IPC 1–7)**:** H02G H02G3/04

CPC: H02G3/0456

European class: H02G3/04G

Classification Explorer

Forward Citations: US6708937, DE19517427,

Abstract:
Source: DE1515385A1 (Claim 1) 1. Kabelbahn fuer die Hauptzuleitungen einer elektrischen In– stallation, die an der Baukonstruktion aufgehaengt ist, d a d u r c h g e k e n n z e i c h n e t, dass die in bekann– ter Weise von Zugstangen (17) getragene Kabelbahn aus zwei im Abstand voneinader aufgehaengten Laengsschienen (15) besteht, die ihrerseits aus Schuessen zweckmaessig gleicher Laenge auf– gebaut sind, wobei diese als Leichtprofile ausgebildeten Laengs schienen (15) an ihren beiden Laengsraendern einenSicke (18) auf, wdisen, deren freier Schenkel (19) eine Verlaengerung aufweist, deren Breite etwa gleich der Tiefe der Sicke (18) ist, wobei von diesen Laengstraegern (15) im Abstand voneinander angeordnete und im Querschnitt hutfoermige Traversen (16) getragen werden, die in ihrer Laengsmitte Durchbrechungen (26) fuer di.: (16) noch zur Abstuetzung von Abdeckpla (30) oder aeGl., die von der Seite her eingeschoben werden ko.:nen.

Machine translation: (claim 1) 1 Cable tray for the main leads of an electrical installa–tion, which is hung to the structure, characterized in that in a known manner of the tie rods (17) supported cable web of two spaced voneinader aufgehaengten Laengsschienen (15), which in turn suitably made of shooting from the hip equal length on–built, wherein these appeared as light sections formed longitudinally (15) at its two Laengsraendern one bead (18), wdisen whose free leg (19) comprises an extension having a width approximately equal to the depth of the bead (18) is, are being carried by these Laengstraegern (15) in spaced apart and in cross section hat–shaped cross members (16), which in its Laengsmitte perforations (26) for di:. (16) nor for supporting Abdeckpla (30) or AEGL., which are inserted from the side ko: NEN..

0) US2006232095A – RETRACTABLE ROLL–UP COVER

213) Family number: 33511571 (US2006232095A) © PatBase

Title: RETRACTABLE ROLL–UP COVER

Priority: US20050670621P 20050413 US20050697293P 20050708 US20060343566 20060131

Family:

Publication number	Publication date	Application number	Application date
US2006232095 AA	20061019	US20060343566	20060131

Probable Assignee: SEDIGHZADEH MARTY

Assignee(s):(std)**:** SEDIGHZADEH MARTY

Inventor(s):(std)**:** SEDIGHZADEH MARTY

Agent(s): MARTY SEDIG

International class (IPC 8–9)**:** B60J11/00 (Advanced/Invention); B60J11/00 (Core/Invention)

CPC: B60J11/02

European class: B60J11/02

US class: 296/98

Classification Explorer

Cited documents: US6824189 BA, US6513858 BA, US6276381 BA, US6206451 BA, US6012759 A, US5915399 A, US5795009 A, US5597196 A, US5516181 A, US4951993 A, US4929016 A, US4925234 A, US4848823 A, US4834446 A, US4825889 A, US4807922 A, US4805654 A, US4718711 A, US4684165 A, US4432581 A, US4174134 A, US4164233 A, US3992053 A, US3785697 A, US3563594 A, US3222102 A, US3050075 A, US2696825 A, US2004238089 AA,

Forward Citations: WO16155432, WO11004105, WO08061433, USD642113, USD642112, USD628949, US9610834, US9577709, US8967172, US8246066, US7866358, US7537265, US2016200180, US2016193905, US2014192910, US2010326981, US2009288891, US2008035254, US2007120391, ITCR20090002, GB2448731, GB2448731, EP2210756, DE102010044602,

Abstract:
Source: US2006232095A A cover system for motor vehicles and other items is described. In one embodiment, the cover system includes a fabric folded in a predetermined manner wound around a roller that is contained in a housing. A front end of the fabric cover is mounted to a guide bar that includes means for securing the guide bar in place when the cover is deployed. In preferred variations, a tubular motor is utilized to facilitate rolling and unrolling of the cover. When used with motor vehicles, the cover system can be mounted in the trunk of the motor vehicle.

214) Family number: 61801724 (WO16062379A1) © PatBase

Title: DEVICE FOR SECURING A GAS GENERATOR IN AN AIRBAG MODULE IN AN OSCILLATING MANNER

Priority: DE201420008432U 20141023

Family:

Publication number	Publication date	Application number	Application date
DE102015011098 A1	20160428	DE201510011098	20150828
DE102015011099 A1	20160428	DE201510011099	20150828
DE102015011100 A1	20160428	DE201510011100	20150828
DE202014008432 U1	20160303	DE201420008432U	20141023
WO16062377 A1	20160428	WO2015EP01989	20151009
WO16062377 A8	20160623	WO2015EP01989	20151009
WO16062378 A1	20160428	WO2015EP01990	20151009
WO16062378 A8	20160623	WO2015EP01990	20151009
WO16062379 A1	20160428	WO2015EP01991	20151009

Probable Assignee: TRW AUTOMOTIVE SAFETY SYSTEMS GMBH

Assignee(s):(std)**:** TRW AUTOMOTIVE SAFETY SYS GMBH ; TRW AUTOMOTIVE SAFETY SYSTEMS GMBH

Assignee(s): TRW AUTOMOTIVE SAFETY SYSTEMS GMBH AND CO KG

Inventor(s):(std)**:** ECK GREGOR ; HAUER CONSTANTIN ; HELMSTETTER MATTHIAS ; KIENZNER ANDREAS

Agent(s): MEHNERT BERNHARD

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

International class (IPC 8–9): B60R21/203 B60R21/217 B60R21/261 (Advanced/Invention)

CPC: B60R21/2037 B60R21/261 B60R2021/2173

Classification Explorer

Cited documents: US2013241181 AA, EP1718503 B1, EP1238869 A1, EP1020332 A2, DE29816923 U1,

DE202006016948 U1

DE202005020680 U1

DE20105434 U1, DE10215330 C1,

DE102012004866 A1

DE102009030601 A1

DE102009006077 A1

DE102007049234 A1

CN203126755 U,

Abstract:
The invention relates to a device (18) for securing a gas generator (14) in an oscillating manner as a vibration–absorbing mass inside an airbag module (10). The invention is characterised in that a securing ring is provided for securing to the gas generator (14), said ring being open at least in sections in the radial direction by a

continuous, radially outwardly directed annular gap and is provided with at least one axially oriented damping member.

0) EP3098095A1 – ANHAENGEKUPPLUNG MIT EINER FIXIEREINRICHTUNG D...

215) Family number: 64147293 (EP3098095A1) © PatBase

Title: ANHAENGEKUPPLUNG MIT EINER FIXIEREINRICHTUNG DRAW BAR WITH A FIXING DEVICE

Priority: DE201510108571 20150529

Family:

Publication number	Publication date	Application number	Application date
DE102015108571 A1	20161201	DE201510108571	20150529
EP3098095 A1	20161130	EP20160170513	20160520

Probable Assignee: WESTFALIA AUTOMOTIVE GMBH

Assignee(s):(std)**:** WESTFALIA AUTOMOTIVE GMBH

Inventor(s):(std)**:** HETFLEISCH RAIMUND

Agent(s): PATENTANWAELTE BREGENZER U REULE PARTNERSCHAFTSGESELLSCHAFT MBB

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

International class (IPC 8–9): B60D1/06 B60D1/26 B60D1/54 (Advanced/Invention)

CPC: B60D1/54 B60D1/06

Classification Explorer

Cited documents: EP1894752 A1, EP1790504 A1, DE19858978 A1,

DE102013007114 A1

Abstract:
Source: EP3098095A1 Die Erfindung betrifft eine Anhaengekupplung (10) fuer ein Kraftfahrzeug (200) mit einem Kupplungsarm (20), wobei der Kupplungsarm (20) an einem am Kraftfahrzeug (200) befestigten oder befestigbaren Halter (11) anhand eines Lagers zwischen einer Gebrauchsstellung (G) und einer Nichtgebrauchsstellung (N) linear und/oder schwenkbar gelagert ist, wobei der Kupplungsarm (20) in der Gebrauchsstellung (G) zum Anhaengen eines Anhaengers oder Befestigen eines Lastentraegers weiter nach hinten vor ein Heck (202) des Kraftfahrzeugs (200) vorsteht als in der fuer einen Nichtgebrauch des Kupplungsarms (20) vorgesehenen Nichtgebrauchsstellung (N), wobei das Lager (16) eine am Halter (11) angeordnete Halterlageraufnahme (104) und ein den Kupplungsarm (20) tragendes Kupplungsarmlagerelement (40) aufweist, das an der Halterlageraufnahme (104) um eine Schwenkachse (S) schwenkbar und/oder eine Schiebeachse verschieblich gelagert ist, wobei die Anhaengekupplung (10) eine Fixiereinrichtung (160) aufweist, die in einer Fixierstellung (F) den Kupplungsarm (20) bezueglich des Halters (11) ortsfest fixiert und in einer Loesestellung (L) den Kupplungsarm (20) zur Verstellung zwischen der Gebrauchsstellung (G) und der Nichtgebrauchstellung freigibt, wobei die Fixiereinrichtung (160) einen Fixierantrieb (110) zum Betaetigen der Fixiereinrichtung (160) zwischen der Fixierstellung (F) und der Loesestellung (L) aufweist, wobei der Fixierantrieb (110) einen Antriebskoerper (112) zum Betaetigen einer Fixierbetaetigungsflaeche (69) eines Fixierkoerpers (60) der Fixiereinrichtung (160) aufweist, um den Fixierkoerper (60) in die den Kupplungsarm (20) am Halter (11) ortsfest fixierenden Fixierstellung (F) zu betaetigen. Es ist vorgesehen, dass ein Loesekoerper (70) anhand von Befestigungsmitteln (180) mit dem Fixierkoerper (60) verbunden ist, wobei an dem Loesekoerper (70) eine Loesebetaetigungsflaeche (79) zum Verstellen des Fixierkoerpers (60) in Richtung der zum Bewegen des Kupplungsarms gegenueber dem Halter (11) vorgesehenen Loesestellung (L) angeordnet ist. The invention relates to a trailer coupling (10) for a motor vehicle (200) with a coupling sleeve (20), where the clutch arm (20) on an attached to the vehicle (200) or befestigbaren holder (11) on the basis of a camp between a use position (G) and a non−use position (N) is linear or swivel bearings, which presides over the clutch arm (20) in the use position (G) to attach a trailer or fasten a load carrier further backwards before a stern (202) of the motor vehicle (200) than for a non−use of the clutch arm () (20) provided not use position (N), where the camp (16) a bearing clamps placed on the holder (11) (104) and wear the clutch arm (20) clutch arm bearing element (40), on the clamps camp (104) to a swing axle (S) swiveling and/or a Schiebeachse rest stored is where the towbar (10) has a fixing unit (160), which firmly fixed the clutch arm (20) with regard to the holder (11) in a fixing position (F), and a release position (L) the clutch arm (20) for the adjustment between the use position (G) and the non−use position releases, with the fixing unit (160) has a fuser drive (110) to actuate the locking device (160) between the fixing position (F) and the release position (L), where the fuser drive (110) has a lifting body (112) to actuate a locking actuating surface (69) of fixing the body (60) of the fixing device (160), to operate the locking body (60) in the fixing position (F) firmly fixing the coupling sleeve (20) on the holder (11). It is envisaged that a Loesekoerper (70) on the basis of fasteners (180) with the fixing body (60) is connected, where there is a Loesebetaetigungsflaeche (79) to adjust the fixing body (60) in the direction of the release position (L) provided to move the clutch arm

compared with the holder (11) at the Loesekoerper (70).